FILE 'HCAPLUS' ENTERED AT 13:13:46 ON 07 JUN 2004
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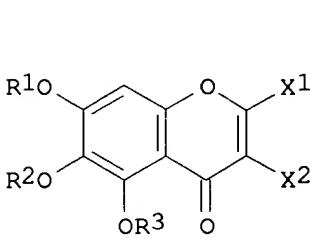
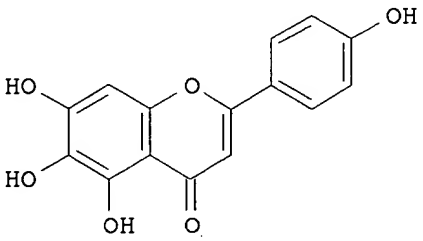
FILE 'USPATFULL' ENTERED AT 13:13:46 ON 07 JUN 2004

=> d l5 abs ibib kwic hitstr 1-39

L5 ANSWER 1 OF 39 HCAPLUS COPYRIGHT 2004 ACS on STN
GI



I



II

AB The title compds. I [wherein R1-R3 = independently H, alkyl, alkenyl, alkynyl, SO3H, PO3H2, carbohydrate, etc.; X1 and X2 = independently Ar-X3-T; Ar = none, Ph, furanyl, thienyl, pyridyl, cyclohexyl, or PhCH2; X3 = H, C, N, O, S, etc.; with provisos] or pharmaceutically acceptable salts thereof are prepared For example, the compound II was prepared in a multi-step synthesis. I are useful for the prevention and treatment of septic shock, organ injury, and other disorders (no data).

ACCESSION NUMBER: 2004:368882 HCAPLUS
DOCUMENT NUMBER: 140:375072
TITLE: Preparation of chromone derivatives for treatment of septic shock, organ injury, and other disorders
INVENTOR(S): Yen, Mao-Hsiung; Wu, Edwin S. C.
PATENT ASSIGNEE(S): Jenken Biosciences, Inc., USA
SOURCE: PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004037193	A2	20040506	WO 2003-US33578	20031022

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,

CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-420306P P 20021022
US 2003-453771P P 20030311

IT Heart, disease
(**ischemia**; preparation of chromone derivs. for treatment of septic shock, organ injury, and other disorders)

IT Aging, animal
Alzheimer's disease
Anti-Alzheimer's agents
Anti-inflammatory agents
Anti-**ischemic** agents
Antiarthritics
Antihypertensives
Antiparkinsonian agents
Antirheumatic agents
Antitumor agents
Arthritis
Atherosclerosis
Autoimmune disease
Cardiovascular agents
Cognition enhancers
Emphysema
Esophagus, neoplasm
Heart, disease
Hypertension
Immunomodulators
Inflammation
Liver, neoplasm
Lung, neoplasm
Mammary gland, neoplasm
Multiple sclerosis
Neoplasm
Ovary, neoplasm
Oxidative stress, biological
Parkinson's disease
Photoprotectants
Prostate gland, neoplasm
Rheumatoid arthritis
Skin, neoplasm
Sunburn
Testis, neoplasm
(preparation of chromone derivs. for treatment of septic shock, organ injury, and other disorders)

IT 529-53-3P 16297-03-3P 23608-41-5P 63934-55-4P 685143-62-8P
685143-64-0P 685143-65-1P 685143-66-2P **685143-67-3P**
685143-68-4P 685143-69-5P 685143-70-8P 685143-73-1P
685143-74-2P 685143-76-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of chromone derivs. for treatment of septic shock, organ injury, and other disorders)

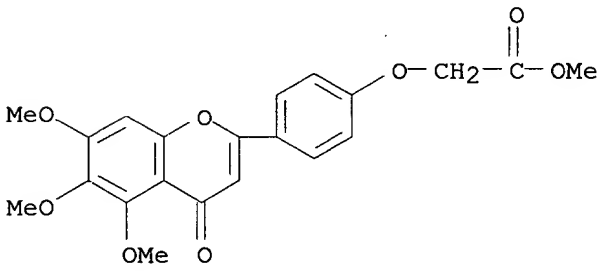
IT **1168-42-9P** 3877-67-6P 6938-18-7P **10176-71-3P**
17742-46-0P 22248-14-2P 23130-22-5P 685143-77-5P 685143-78-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(intermediate; preparation of chromone derivs. for treatment of septic shock, organ injury, and other disorders)

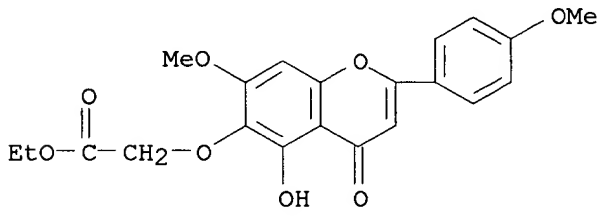
IT 93-97-0, Benzoic anhydride 96-32-2, Methyl bromoacetate 105-36-2, Ethyl bromoacetate 123-11-5, 4-Methoxybenzaldehyde, reactions 140-29-4, Benzylcyanide 556-52-5, Oxiranemethanol 642-71-7, 3,4,5-Trimethoxyphenol 22440-58-0, 4-Nitrocinnamoyl chloride **53002-40-7** 60948-17-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of chromone derivs. for treatment of septic shock, organ injury, and other disorders)

IT **685143-67-3P 685143-68-4P 685143-74-2P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of chromone derivs. for treatment of septic shock, organ injury, and other disorders)

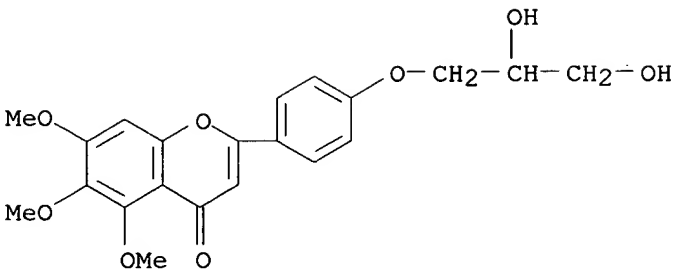
RN 685143-67-3 HCAPLUS
CN Acetic acid, [4-(5,6,7-trimethoxy-4-oxo-4H-1-benzopyran-2-yl)phenoxy]-, methyl ester (9CI) (CA INDEX NAME)



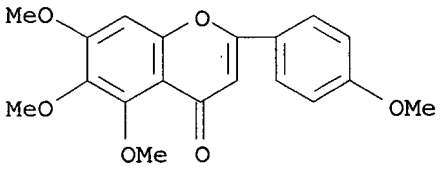
RN 685143-68-4 HCAPLUS
CN Acetic acid, [[5-hydroxy-7-methoxy-2-(4-methoxyphenyl)-4-oxo-4H-1-benzopyran-6-yl]oxy]-, ethyl ester (9CI) (CA INDEX NAME)



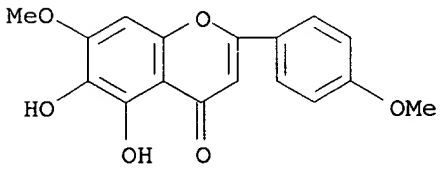
RN 685143-74-2 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-(2,3-dihydroxypropoxy)phenyl]-5,6,7-trimethoxy- (9CI) (CA INDEX NAME)



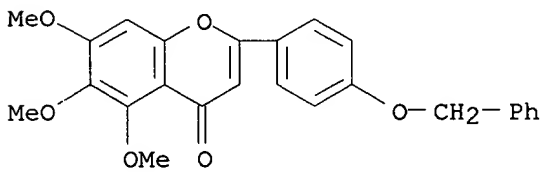
IT **1168-42-9P 10176-71-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of chromone derivs. for treatment of septic shock, organ injury, and other disorders)
RN 1168-42-9 HCAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trimethoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 10176-71-3 HCAPLUS
CN 4H-1-Benzopyran-4-one, 5,6-dihydroxy-7-methoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



IT **53002-40-7**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of chromone derivs. for treatment of septic shock, organ injury, and other disorders)
RN 53002-40-7 HCAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7-trimethoxy-2-[4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



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L5 ANSWER 2 OF 39 HCAPLUS COPYRIGHT 2004 ACS on STN
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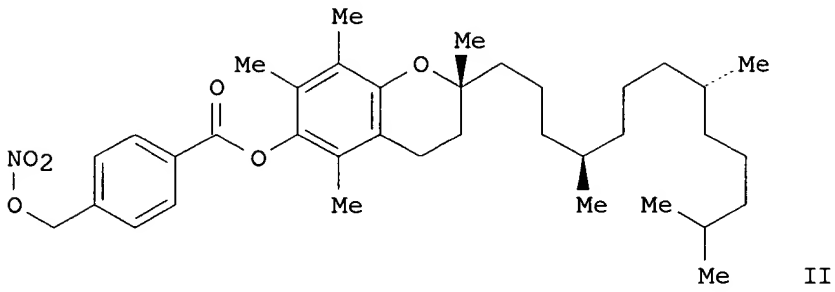

II

AB New pharmaceutical compds. of general formula F-(X)q (I) [q = 1-5, preferably 1; F is chosen among drugs such as δ-tocopherol, clidanac, diethylhomospermine, glucosamine, thymocartin, vofopitant, etc.; X is chosen among 4 groups M, T, V, and Y where M = ONO2, nitrate salt, nitrite ester, ONO, thoinitrite, SNO, etc., T = OR1-M, OR1OR1-M, SR1NR2R1-M, NR2R1-M, NR2R1SR1-M, etc., R1 = saturated or unsatd., linear or branched alkylene, having 1 to 21 carbon atoms or a saturated or unsatd., optionally heterosubstituted or branched cycloalkylene, having 3 to 7 carbon atoms or an optionally heterosubstituted arylene having 3 to 7 carbon atoms; R2 = H, saturated or unsatd., linear or branched 1-21 carbon atom alkyl, saturated or unsatd. optionally heterosubstituted or branched 3-7 carbon cycloalkyl, optionally heterosubstituted 3-7 carbon aryl; R1, R2 = OH, SH, F, Cl, Br, OPO3H2, CO2H, etc.; bond between F and T = carboxylic ester, carboxylic amide, glycoside, azo, thioester, sulfonic ester, etc.; V = Z-M2, OZ-M2, NR2Z-M2, R1Z-M2, OR1-M2, OR1Z-M2, M2 = M, R1-M, OR1-M, SR1-M, NR2R1-M; ZM2 = COCH2CH(M2)CH2N+Me3, COCH2CH2COM2, COCH(NHR2)CH2M2, etc.; Y = 4-COC6H4CH2ONO2, O(CH2)4ONO2, COCH(NH2)CH2ONO2, 3-OC6H4CH2ONO2, etc.] were prepared For example, α-tocopherol reacted with 4-HO2CC6H4CH2ONO2 to give the nitroxymethyl derivative II. The compds. of general formula I are nitrate prodrugs which can release nitric oxide in vivo in a controlled and selective way and without hypotensive side effects and for this reason they are useful for the preparation of medicines for prevention and treatment of inflammatory, **ischemic**, degenerative and proliferative diseases of musculoskeletal, tegumental, respiratory, gastrointestinal, genito-urinary and central nervous systems.

ACCESSION NUMBER: 2003:652131 HCAPLUS
DOCUMENT NUMBER: 139:214237
TITLE: Preparation of nitrate prodrugs able to release nitric oxide in a controlled and selective way and their use for prevention and treatment of inflammatory, **ischemic** and proliferative diseases
INVENTOR(S): Scaramuzzino, Giovanni
PATENT ASSIGNEE(S): Italy
SOURCE: Eur. Pat. Appl., 313 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1336602	A1	20030820	EP 2002-425075	20020213

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.: EP 2002-425075 20020213

TI . . . able to release nitric oxide in a controlled and selective way and their use for prevention and treatment of inflammatory, **ischemic** and proliferative diseases

AB . . . side effects and for this reason they are useful for the preparation of medicines for prevention and treatment of inflammatory, **ischemic**, degenerative and proliferative diseases of musculoskeletal, tegumental, respiratory, gastrointestinal, genito-urinary and central nervous systems.

ST nitrate prodrug prepn; inflammation nitrate prodrug; **ischemia** nitrate prodrug; proliferative disease nitrate prodrug; degenerative disease nitrate prodrug; musculoskeletal disease nitrate prodrug; respiratory disease nitrate prodrug; gastrointestinal disease. . .

IT Intestine, disease
(Crohn's; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Bone, disease
(Paget's; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Respiratory distress syndrome
(adult; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Prostate gland, disease
(benign hyperplasia; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Bronchi, disease
(bronchitis; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Nervous system, disease
(central; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Lung, disease
(chronic obstructive; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Intestine, neoplasm
(colorectal; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Disease, animal
(degenerative; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Sexual behavior
(disorder; preparation of nitrate prodrugs for treating or preventing

inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Intestine, disease
(duodenum, ulcer; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Invertebrate body covering
(epidermis; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Esophagus, disease
(esophagitis; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Intestine, neoplasm
(familial polyposis; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Stomach, disease
(gastritis; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Bladder, disease
(incontinence; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Muscle
(musculoskeletal diseases; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Hemoglobins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(nitrosylHbs; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Pancreas, disease
(pancreatitis; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Allergy
Alzheimer's disease
Anti-inflammatory agents
Anti-**ischemic** agents
Antitumor agents
Asthma
Bladder, neoplasm
Blood pressure
Brain, neoplasm
Cirrhosis
Cystic fibrosis
Dermatitis
Digestive tract, disease
Emphysema
Esophagus, neoplasm
Inflammation
Ischemia
Liver, neoplasm

Lung, neoplasm
Mammary gland, neoplasm
Multiple sclerosis
Osteoarthritis
Osteoporosis
Ovary, neoplasm
Pancreas, neoplasm
Prostate gland, neoplasm
Psoriasis
Reproductive tract, disease
Respiratory tract, disease
Rheumatoid arthritis
Skin, neoplasm
Stomach, neoplasm
Ulcer
Urinary tract, disease
Uterus, neoplasm
(preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Drug delivery systems
(prodrugs; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Disease, animal
(proliferative; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Prostate gland, disease
(prostatitis; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Nose, disease
(rhinitis; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Lupus erythematosus
(systemic; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Digestive tract, disease
(ulcer, peptic; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Intestine, disease
(ulcerative colitis; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT Biological transport
(uptake; preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT 55-63-0, Nitroglycerine 78-11-5, Pentaerythritol tetranitrate 87-33-2, Isosorbide dinitrate 14402-89-2, Sodium nitroprusside 16051-77-7, Isosorbide mononitrate 65141-46-0, Nicorandil 206197-03-7
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT 586347-22-0P
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT 327610-87-7P 571186-50-0P 571186-51-1P 586347-27-5P 586347-30-0P
586347-40-2P 586347-41-3P 586347-44-6P
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT 50-23-7, Hydrocortisone
RL: BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent)
(preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT 586347-24-2P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT 13005-09-9P 96513-33-6P 116539-59-4P 198483-54-4P 257625-98-2P
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RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT 586350-07-4P 586350-08-5P 586350-09-6P 586350-11-0P 586350-12-1P
586350-13-2P 586350-14-3P 586350-15-4P 586350-17-6P 586350-18-7P
586350-19-8P 586350-21-2P 586350-23-4P 586350-24-5P 586350-26-7P
586350-27-8P 586350-28-9P 586350-29-0P 586350-30-3P 586350-31-4P
586350-32-5P 586350-33-6P 586350-34-7P 586350-35-8P 586350-36-9P
586350-37-0P 586350-38-1P 586350-39-2P 586350-40-5P 586350-41-6P
586350-42-7P 586350-43-8P 586350-44-9P 586350-45-0P 586350-46-1P
586350-47-2P 586350-48-3P **586350-49-4P** 586350-50-7P
586350-51-8P 586350-52-9P 586350-53-0P 586350-54-1P 586350-55-2P
586350-56-3P 586350-57-4P 586350-59-6P 586350-60-9P 586350-61-0P
586350-62-1P 586350-63-2P 586350-65-4P 586350-66-5P 586350-67-6P
586350-68-7P 586350-69-8P 586350-70-1P 586350-71-2P 586350-72-3P
586350-73-4P 586350-74-5P 586350-75-6P 586350-77-8P 586350-78-9P
586350-79-0P 586350-80-3P 586350-81-4P 586350-82-5P 586350-83-6P
586350-85-8P 586350-86-9P 586350-88-1P 586350-89-2P 586350-90-5P
586350-91-6P 586350-92-7P 586350-93-8P 586350-94-9P 586350-96-1P
586350-97-2P 586350-98-3P 586350-99-4P 586351-01-1P 586351-02-2P
586351-03-3P 586351-04-4P 586351-05-5P 586351-06-6P 586351-07-7P
586351-08-8P 586351-09-9P 586351-10-2P 586351-11-3P 586351-12-4P
586351-13-5P 586351-14-6P 586388-29-6P 586388-33-2P 586388-35-4P
586388-39-8P 586388-42-3P 586388-45-6P 586388-46-7P 586388-47-8P
586388-48-9P 586388-49-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

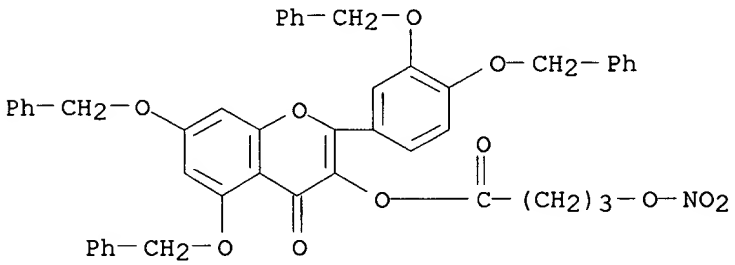
IT 50-02-2, Dexamethasone 50-24-8, Prednisolone 53-43-0, Prasterone
59-02-9, α-Tocopherol 66-84-2, D-Glucosamine hydrochloride
69-72-7, Salicylic acid, reactions 73-05-2, Phentolamine hydrochloride
83-88-5, Riboflavin, reactions 103-90-2, Acetaminophen 108-88-3,
Toluene, reactions 117-39-5, Quercetin 128-13-2, Ursodiol 132-69-4,
Benzydamine hydrochloride 620-24-6, 3-Hydroxybenzyl alcohol 876-08-4,
4-(Chloromethyl)benzoyl chloride 927-58-2, 4-Bromobutyryl chloride
2170-03-8, Itaconic anhydride 6232-88-8, 4-(Bromomethyl)benzoic acid
33036-62-3, 4-Bromobutan-1-ol 51333-22-3, Budesonide 56296-78-7,

Fluoxetine hydrochloride 80573-04-2, Balsalazide 82413-20-5, Droloxifene 92340-57-3, 5-Hydroxyomeprazole 119169-78-7, Epristeride 131926-98-2, 5-Hydroxylansoprazole 136434-34-9, Duloxetine hydrochloride 151602-49-2, 5-O-Desmethylomeprazole 169590-42-5, Celecoxib 181695-72-7, Valdecoxib
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

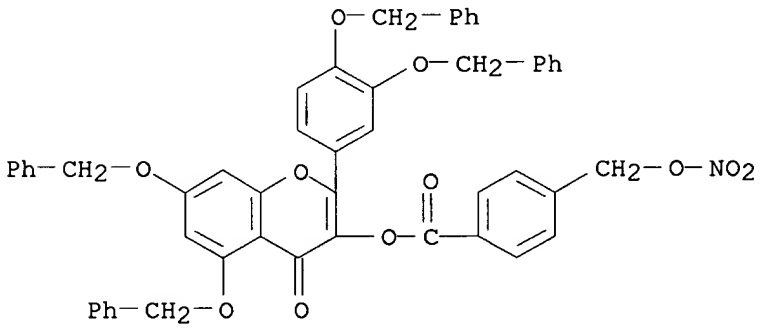
IT 19340-33-1P 101014-64-6P 101973-77-7P 116081-53-9P **116973-12-7P** 132521-05-2P 190442-16-1P 258278-55-6P 571186-61-3P 586347-35-5P **586347-37-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

IT **586347-38-8P 586350-49-4P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

RN 586347-38-8 HCAPLUS
CN Butanoic acid, 4-(nitrooxy)-, 2-[3,4-bis(phenylmethoxy)phenyl]-4-oxo-5,7-bis(phenylmethoxy)-4H-1-benzopyran-3-yl ester (9CI) (CA INDEX NAME)



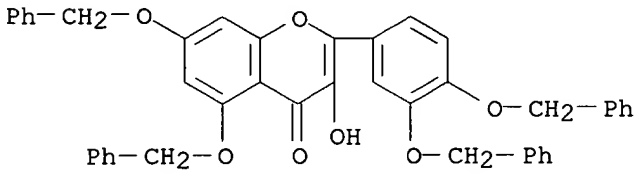
RN 586350-49-4 HCAPLUS
CN Benzoic acid, 4-[(nitrooxy)methyl]-, 2-[3,4-bis(phenylmethoxy)phenyl]-4-oxo-5,7-bis(phenylmethoxy)-4H-1-benzopyran-3-yl ester (9CI) (CA INDEX NAME)



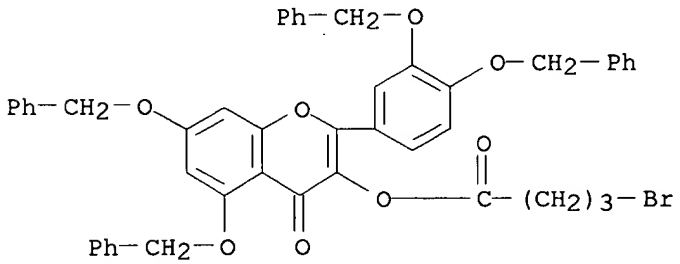
IT **116973-12-7P 586347-37-7P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of nitrate prodrugs for treating or preventing inflammatory, **ischemic**, degenerative, and proliferative diseases)

RN 116973-12-7 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[3,4-bis(phenylmethoxy)phenyl]-3-hydroxy-5,7-bis(phenylmethoxy)- (9CI) (CA INDEX NAME)



RN 586347-37-7 HCAPLUS
CN Butanoic acid, 4-bromo-, 2-[3,4-bis(phenylmethoxy)phenyl]-4-oxo-5,7-bis(phenylmethoxy)-4H-1-benzopyran-3-yl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 39 USPATFULL on STN

AB A method and composition for the treatment of diabetic neuropathy is disclosed. The composition comprises a cold compounded mixture of a compound that promotes synthesis of nerve growth factor, an aldose reductase inhibitor and an antioxidant formulated in a pharmaceutically acceptable carrier. It has been found that this combination of active agents provides significant, effective relief of the symptoms of diabetic neuropathy, as well as at least partial recovery of lost neurological function in some cases. In view of the consensus in the art that effective combinations of various active agents have not been demonstrated to be effective for the treatment of diabetic neuropathy, the present invention provides a surprising and unexpected effect. In addition, the topical compositions of the present invention, when used in effective amounts to treat diabetic neuropathy, do not exhibit the severe side effects of many prior art compositions proposed for treatment of this ailment.

In a second aspect, a method for the topical administration of a composition in accordance with the present invention for the treatment of diabetic neuropathy is disclosed. In the method, an effective amount of the composition of the invention is topically administered to the

areas of the body that have been adversely affected by the diabetic neuropathy on a regular basis over a period of time sufficient to provide the beneficial effects of relief from the symptoms and at least some recovery of the damaged nerve tissues.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2003:200519 USPATFULL
TITLE:	Method and composition for the topical treatment of diabetic neuropathy
INVENTOR(S):	Rosenbloom, Richard Allen, Elkins Park, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003138504	A1	20030724
APPLICATION INFO.:	US 2003-369025	A1	20030219 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2000-740811, filed on 21 Dec 2000, GRANTED, Pat. No. US 6555573		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	KNOBLE & YOSHIDA, EIGHT PENN CENTER, SUITE 1350, 1628 JOHN F KENNEDY BLVD, PHILADELPHIA, PA, 19103		
NUMBER OF CLAIMS:	26		
EXEMPLARY CLAIM:	1		
LINE COUNT:	667		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . is disclosed in U.S. Pat. No. 5,840,736 (Zelle et al.). In this method, pharmaceutical compositions for stimulating the growth of **neurites** in nerve cells comprising a neurotrophic amount of a compound and a nerve growth factor. These compositions may be administered. . .

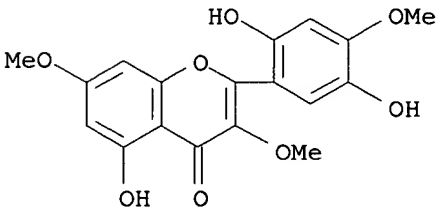
IT 50-81-7, Ascorbic acid, biological studies 58-95-7, Vitamin E acetate 67-97-0, Vitamin D3 67-97-0D, Vitamin D3, analogs and precursors 70-18-8, Glutathione, biological studies 81-13-0, D-Panthenol 87-44-5, Caryophyllene 90-18-6, Quercetagetin 90-19-7, Rhamnetin 117-39-5, Quercetin 120-72-9, Indole, biological studies 137-66-6, Ascorbyl palmitate 142-50-7, Nerolidol 152-95-4, Sophoricoside 153-18-4, Rutin 303-98-0, Coenzyme Q10 446-72-0, Genistein 474-07-7, Brazilin 476-66-4, Ellagic acid 480-10-4, Astragalin 480-16-0, Morin 480-36-4, Linarin 480-40-0, Chrysin 480-41-1, Naringenin 480-44-4, Acacetin 482-36-0, Hyperin 482-39-3, Kaempferol-3-rhamnoside 483-76-1, δ-Cadinene 491-50-9, Quercimeritrin 491-67-8, Baicalein 491-70-3, Luteolin 491-71-4, Chrysoeriol 501-15-5, Epinin 517-28-2, Haematoxylin 520-11-6, Nepetin 520-12-7, Pectolinarigenin 520-18-3, Kaempferol 520-26-3, Hesperidine 520-33-2, Hesperitin 520-34-3, Diosmetin 520-36-5, Apigenin 522-12-3, Quercitrin 528-48-3, Fisetin 528-58-5, Cyanidin 529-44-2, Myricetin 529-53-3, Scutellarein 548-83-4, Galangin **549-17-7**, Oxyayanin-a 549-32-6, Reynoutrin 569-90-4, Nepitrin 572-30-5, Avicularin 578-74-5, Cosmosiin 632-85-9, Wogonin 652-78-8 961-29-5, Isoliquiritigenin 970-74-1, (-)-Epigallocatechin 989-51-5, (-)-Epigallocatechin-3-gallate 1200-22-2, α-Lipoic acid 1340-08-5, Citrin 1617-49-8, 3,3',4-Tri-o-methylellagic acid 1617-53-4, Amentoflavone 3681-93-4, Vitexin 5041-67-8, Juglanin 5041-81-6, Isoliquiritin 5188-73-8, Axillarin 5373-11-5, Luteolin-7-glucoside **6601-54-3** 10236-47-2, Naringin 11103-57-4, Vitamin A 16485-10-2, DL-Panthenol 17306-46-6, Rhoifolin

17680-84-1, Hispiduloside 17912-87-7, Myricitrin 18003-33-3, 6-Hydroxyluteolin 18490-95-4, Brevifolin carboxylic acid 20229-56-5, Spiraeoside 21637-25-2, Isoquercitrin 22697-65-0, 6-Hydroxykaempferol-3,6-dimethyl ether **23615-30-7**, Chrysosplenoside-a 23627-87-4, Trifolin 24512-68-3, Sorbarin 25321-00-0, Chrysosplenoside d 25694-72-8, Lonicerin 26544-34-3, Apiin 28978-02-1, Pectolinarin 29741-10-4, Luteolin-7-glucuronide 29913-71-1, Licuraside 32222-06-3, 1,25-Dihydroxyvitamin D3 32602-81-6, Kaempferol-3-neohesperidoside 53755-56-9, Linariin 60534-79-4 61276-17-3, Acteoside 61360-94-9, Flavosativaside 61891-39-2 64661-76-3, Flavocannabiside 65666-07-1, Silymarin 67255-34-9, Iridine 70360-12-2, Sideritoflavone 73428-17-8, Manniflavanone 79886-50-3 84632-09-7, 6,3',4'-Trihydroxy-5,7,8-trimethoxyflavone 94492-24-7, 2'-Acetylacteoside 97560-11-7, Kolaviron 102865-36-1, Methyl scutellarate 107091-01-0, Neriumoside 107646-82-2, Ethyl brevifolin carboxylate 125712-75-6 132951-90-7, Macrocarpal-a 142628-53-3, Macrocarpal-g 142647-71-0, Macrocarpal d 142698-60-0, Macrocarpal-b 167678-65-1 439217-49-9
(compns. containing nerve growth factor promoters, aldose reductase inhibitors and antioxidants for treatment of diabetic neuropathy)

IT **549-17-7**, Oxyayanin-a **6601-54-3 23615-30-7**, Chrysosplenoside-a
(compns. containing nerve growth factor promoters, aldose reductase inhibitors and antioxidants for treatment of diabetic neuropathy)

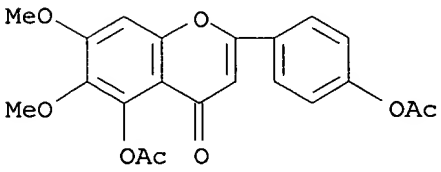
RN 549-17-7 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-(2,5-dihydroxy-4-methoxyphenyl)-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)



RN 6601-54-3 USPATFULL

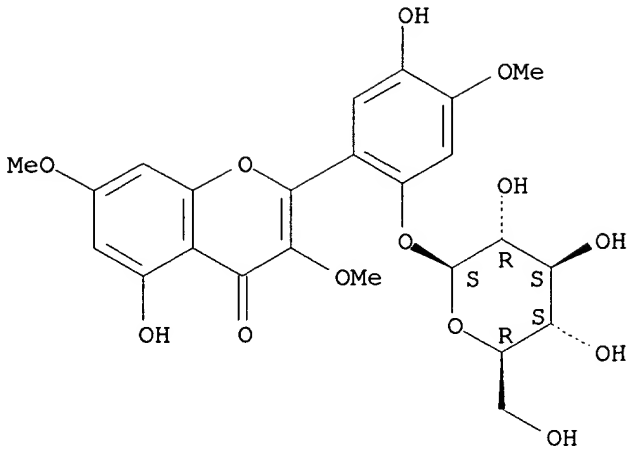
CN 4H-1-Benzopyran-4-one, 5-(acetyloxy)-2-[4-(acetyloxy)phenyl]-6,7-dimethoxy- (9CI) (CA INDEX NAME)



RN 23615-30-7 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-[2-(β-D-glucopyranosyloxy)-5-hydroxy-4-methoxyphenyl]-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 4 OF 39 USPATFULL on STN

AB Compositions and methods for the prevention, reduction or treatment of adverse effects due to exposure to ionizing radiation, including at least one flavonoid and at least one non-flavonoid antioxidant, optionally formulated in a acceptable carrier for a topical composition. The composition of the present invention may further include optional ingredients such as selenium, selenium compounds, anti-inflammatories, organic germanium compounds, compounds that regulate cell differentiation, Korean ginseng, American ginseng, Siberian ginseng and B-complex vitamins. A method for the topical administration of the composition in accordance with the present invention for the purpose of reducing, treating or preventing adverse effects caused by ionizing radiation involves topically administering a safe and effective amount of the composition of the invention an area of skin, which has been, is being or will be exposed to ionizing radiation. The compositions and methods can be employed to reduce, treat or prevent radiation injury caused by a wide variety of types of exposure to ionizing radiation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2003:172692 USPATFULL
TITLE:	Topical compositions and methods for treatment of adverse effects of ionizing radiation
INVENTOR(S):	Rosenbloom, Richard A., Elkins Park, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003118536	A1	20030626
APPLICATION INFO.:	US 2002-288761	A1	20021106 (10)

RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2002-132642, filed on 25 Apr 2002, PENDING Continuation-in-part of Ser. No. US 2002-45790, filed on 14 Jan 2002, PENDING Continuation-in-part of Ser. No. US 2001-993003, filed on 6 Nov 2001, PENDING
DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	KNOBLE & YOSHIDA, EIGHT PENN CENTER, SUITE 1350, 1628 JOHN F KENNEDY BLVD, PHILADELPHIA, PA, 19103
NUMBER OF CLAIMS:	40

EXEMPLARY CLAIM: 1
LINE COUNT: 1162
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

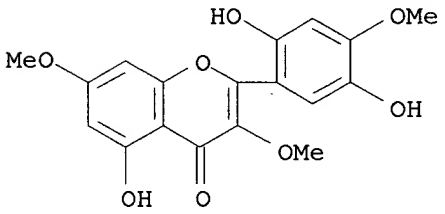
SUMM . . . In addition, flavonoids may have other beneficial effects such as acting as an anti-inflammatory and maintaining the structural integrity of **ischemic** or hypoxic tissue, which may occur after radiation exposure. Examples of flavonoids include, without limitation, flavonones, flavanols, anthocyanidins, proanthocyanidins, procyanidolic.
. .

IT 50-81-7, Ascorbic acid, biological studies 52-90-4, Cysteine, biological studies 56-89-3, Cystine, biological studies 58-95-7, Vitamin e acetate 59-92-7, biological studies 60-18-4, Tyrosine, biological studies 67-97-0, Vitamin d3 70-18-8, Glutathione, biological studies 83-86-3, Phytic acid 87-44-5, Caryophyllene 90-18-6, Quercetagetin 90-19-7, Rhamnetin 107-35-7, Taurine 117-39-5, Quercetin 120-72-9, Indole, biological studies 122-48-5, Zingerone 134-03-2, Sodium ascorbate 137-66-6, Ascorbyl palmitate 142-50-7, Nerolidol 149-91-7, Gallic acid, biological studies 152-95-4, Sophoricoside 153-18-4, Rutin 303-98-0, Coenzyme q10 331-39-5, Caffeic acid 446-72-0, Genistein 462-20-4 474-07-7, Brazilin 476-66-4, Ellagic acid 480-10-4, Astragalin 480-36-4, Linarin 480-40-0 480-41-1, Naringenin 480-44-4, Acacetin 482-36-0, Hyperin 482-39-3, Kaempferol 3-rhamnoside 483-76-1, δ-Cadinene 490-46-0, (-)-Epicatechin 490-83-5, Dehydroascorbic acid 491-50-9, Quercimeritrin 491-67-8, Baicalein 491-70-3, Luteolin 491-71-4, Chrysoeriol 500-38-9, Nordihydroguaiaretic acid 501-36-0, Resveratrol 517-28-2, Haematoxylin 520-11-6, Nepetin 520-12-7, Pectolinarigenin 520-18-3, Kaempferol 520-26-3, Hesperidine 520-34-3, Diosmetin 520-36-5, Apigenin 522-12-3 529-44-2, Myricetin 529-53-3, Scutellarein 539-86-6, Allicin **549-17-7**, Oxyayanin a 549-32-6, Reynoutrin 569-90-4, Nepetrin 572-30-5, Avicularin 578-74-5, Cosmosiin 616-91-1, N-Acetylcysteine 632-85-9, Wogonin 652-78-8, Gossypetin 8-glucoside 961-29-5, Isoliquiritigenin 970-74-1, (-)-Epigallocatechin 989-51-5, Epigallocatechin 3-gallate 1135-24-6, Ferulic acid 1200-22-2, Lipoic acid 1406-18-4, Vitamin e 1617-49-8 1617-53-4, Amentoflavone 3681-93-4, Vitexin 5041-67-8, Juglanin 5041-81-6, Isoliquiritin 5188-73-8, Axillarin 5373-11-5, Luteolin 7-glucoside 5743-27-1, Calcium ascorbate **6601-54-3**, Diacetyl cirsimaritin 6829-55-6, Tocotrienol 7235-40-7, β-Carotene 7440-56-4, Germanium, biological studies 9001-05-2, Catalase 9013-66-5, Glutathione peroxidase 9051-97-2 9054-89-1, Superoxide dismutase 10236-47-2, Naringin 11006-56-7, Pangamic acid 11042-64-1, γ-Oryzanol 11103-57-4, Vitamin a 11103-57-4D, Vitamin a, esters 15421-15-5, Potassium ascorbate 17306-46-6, Rhoifolin 17680-84-1, Hispiduloside 17912-87-7 18003-33-3, 6-Hydroxyluteolin 18490-95-4, Brevifolincarboxylic acid 19660-77-6, Chlorophyllin 20229-56-5, Spiraeoside 21090-54-0 21593-77-1, S-Allyl-L-cysteine 21637-25-2, Isoquercitrin 22697-65-0, 6-Hydroxykaempferol 3,6-dimethyl ether 23313-12-4 **23615-30-7**, Chrysosplenoside a 23627-87-4, Trifolin 24512-68-3, Sorbarin 25321-00-0, Chrysosplenoside d 25395-66-8, L-Ascorbic acid monostearate 25694-72-8, Lonicerin 26544-34-3, Apiin 28474-90-0, L-Ascorbic acid dipalmitate 28978-02-1, Pectolinarin 29741-10-4, Luteolin 7-glucuronide 29913-71-1, Licuraside 32511-63-0, 1,25-Dihydroxyvitamin d3 32602-81-6 37627-95-5 53755-56-9, Linariin 57828-26-9, Lipoic acid 60534-79-4 61276-17-3, Acteoside 61360-94-9, Flavosativaside 61891-39-2 64661-76-3, Flavocannabiside

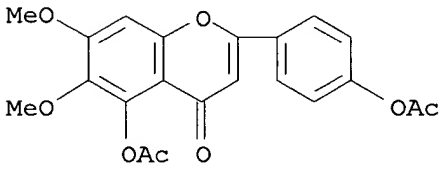
67255-34-9, Iridine 70360-12-2, Sideritoflavone 72909-34-3, Pyrroloquinoline quinone 78206-57-2 79886-50-3, 1,2,3,6-Tetra-O-galloyl-β-D-glucose 94492-24-7 97560-11-7, Kolaviron 107646-82-2, Ethyl brevifolincarboxylate 120444-60-2 125712-75-6 132951-90-7, Macrocarpal a 142628-53-3, Macrocarpal g 142647-71-0, Macrocarpal d 142698-60-0, Macrocarpal b 151728-40-4, Zinc ascorbate 439217-49-9, Dimethylmussaenoside 524689-97-2 524727-65-9, Maniflavone 524729-83-7, Nelumboside 536737-05-0 537684-20-1, Dosmetin 537684-31-4, Ebinin
(topical compns. containing flavonoids and antioxidants for treatment of adverse effects of ionizing radiation)

IT **549-17-7**, Oxyayanin a **6601-54-3**, Diacetyl cirsimaritin
23615-30-7, Chrysosplenoside a
(topical compns. containing flavonoids and antioxidants for treatment of adverse effects of ionizing radiation)

RN 549-17-7 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(2,5-dihydroxy-4-methoxyphenyl)-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)

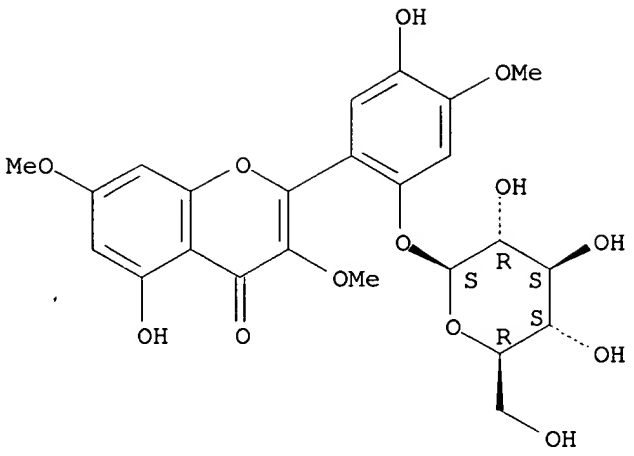


RN 6601-54-3 USPATFULL
CN 4H-1-Benzopyran-4-one, 5-(acetyloxy)-2-[4-(acetyloxy)phenyl]-6,7-dimethoxy- (9CI) (CA INDEX NAME)



RN 23615-30-7 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-[2-(β-D-glucopyranosyloxy)-5-hydroxy-4-methoxyphenyl]-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 5 OF 39 USPATFULL on STN

AB Methods for the reduction, treatment or partial prevention of reactive and inflammatory dermatoses, including eczema and psoriasis, are provided. The methods comprise administering a composition that includes one or more flavonoids and is optionally formulated in a pharmaceutically acceptable carrier. Also provided are methods of facilitating the healing of wounds, and of cleansing, beautifying, and improving the cosmetic appearance of the skin. Further optional ingredients may be added to the composition used in the present invention, such as non-flavonoid antioxidants, and one or more compounds that regulate cell differentiation and/or cell proliferation. The composition may be administered as a topical composition.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2003:153363 USPATFULL		
TITLE:	Methods for the treatment of skin disorders		
INVENTOR(S):	Rosenbloom, Richard A., Elkins Park, PA, UNITED STATES		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003105031	A1	20030605
APPLICATION INFO.:	US 2002-279315	A1	20021024 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2002-132642, filed on 25 Apr 2002, PENDING Continuation-in-part of Ser. No. US 2002-45790, filed on 14 Jan 2002, PENDING Continuation-in-part of Ser. No. US 2001-993003, filed on 6 Nov 2001, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	KNOBLE & YOSHIDA, EIGHT PENN CENTER, SUITE 1350, 1628 JOHN F KENNEDY BLVD, PHILADELPHIA, PA, 19103		
NUMBER OF CLAIMS:	25		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1028		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . the treatment of reactive and inflammatory dermatoses. Also, flavonoids have the property of protecting certain cells and tissues, for example **ischemic** tissue and hypoxic tissue. Finally,

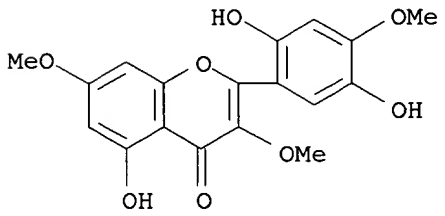
flavonoids inhibit histamines and leukotrienes, chemicals that contribute to atopic reactions.

IT 87-44-5, Caryophyllene 90-18-6, Quercetagetin 90-19-7, Rhamnetin 117-39-5, Quercetin 120-72-9, Indole, biological studies 152-95-4, Sophoricoside 153-18-4, Rutin 446-72-0, Genistein 474-07-7, Brazilin 476-66-4, Ellagic acid 480-10-4, Astragalin 480-36-4, Linarin 480-40-0, Chrysin 480-41-1, Naringenin 480-44-4, Acacetin 482-35-9, Isoquercetin 482-36-0, Hyperin 482-39-3, Kaempferol 3-rhamnoside 483-76-1, δ-Cadinene 491-50-9, Quercimeritrin 491-67-8, Baicalein 491-70-3, Luteolin 491-71-4, Chrysoeriol 517-28-2, Haematoxylin 520-11-6, Nepetin 520-12-7, Pectolinarigenin 520-26-3, Hesperidin 520-34-3, Diosmetin 520-36-5, Apigenin 522-12-3, Quercitrin 529-53-3, Scutellarein **549-17-7**, Oxyayanin a 549-32-6, Reynoutrin 569-90-4, Nepetrin 572-30-5, Avicularin 578-74-5, Cosmosiin 632-85-9, Wogonin 652-78-8, Gossypetin 8-glucoside 961-29-5, Isoliquiritigenin 1617-53-4, Amentoflavone 3681-93-4, Vitexin 5041-67-8, Juglanin 5041-81-6, Isoliquiritin 5145-53-9 5188-73-8, Axillarin 5373-11-5, Luteolin 7-glucoside 6151-25-3, Quercetin dihydrate **6601-54-3** 7212-44-4, Nerolidol 10236-47-2, Naringin 17306-46-6, Rhoifolin 17680-84-1, Hispiduloside 18003-33-3, 6-Hydroxyluteolin 18490-95-4, Brevifolincarboxylic acid 20229-56-5, Spiraeoside 22697-65-0, 6-Hydroxykaempferol 3.6-dimethyl ether **23615-30-7**, Chrysosplenoside a 23627-87-4, Trifolin 24512-68-3, Sorbarin 25321-00-0, Chrysosplenoside d 25694-72-8, Lonicerin 26544-34-3, Apiin 29741-10-4, Luteolin 7-glucuronide 29913-71-1, Licuraside 32602-81-6 53755-56-9, Linariin 60534-79-4 61276-17-3, Acteoside 61360-94-9, Flavosativaside 61891-39-2 64661-76-3, Flavocannabiside 67255-34-9, Iridine 70360-12-2, Sideritoflavone 79886-50-3, 1,2,3,6-Tetra-O-galloylβ-D-glucose 84632-09-7 94492-24-7 97560-11-7, Kolaviron 107646-82-2, Cyclopenta[c][2]benzopyran-1-carboxylic acid, 1,2,3,5-tetrahydro-7,8,9-trihydroxy-3,5-dioxo-, ethyl ester 125712-75-6 132951-90-7, Macrocarpal a 142628-53-3, Macrocarpal g 142647-71-0, Macrocarpal d 142698-60-0, Macrocarpal b 439217-49-9, Dimethylmussaenoside 524727-65-9, Maniflavone 524729-83-7, Nelumboside 536737-05-0
(flavonoid compns. for the treatment of skin disorders)

IT **549-17-7**, Oxyayanin a **6601-54-3** **23615-30-7**, Chrysosplenoside a
(flavonoid compns. for the treatment of skin disorders)

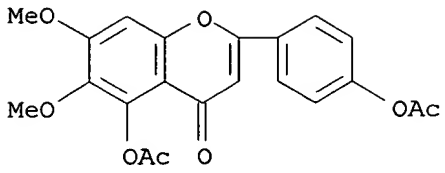
RN 549-17-7 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-(2,5-dihydroxy-4-methoxyphenyl)-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)



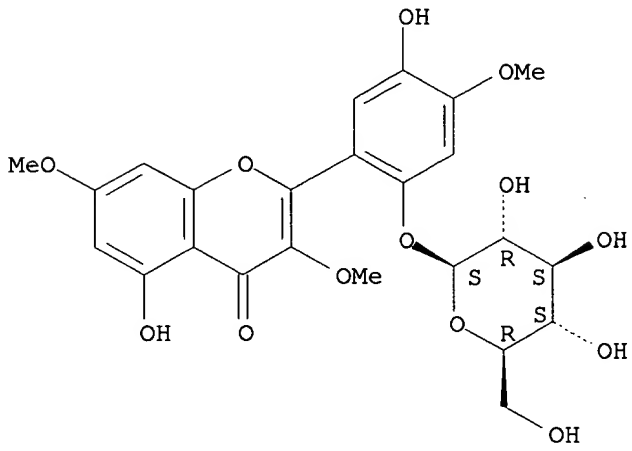
RN 6601-54-3 USPATFULL

CN 4H-1-Benzopyran-4-one, 5-(acetyloxy)-2-[4-(acetyloxy)phenyl]-6,7-dimethoxy- (9CI) (CA INDEX NAME)



RN 23615-30-7 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-[2-(β-D-glucopyranosyloxy)-5-hydroxy-4-methoxyphenyl]-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 6 OF 39 USPATFULL on STN
AB A nutritional supplement composition for the prevention, reduction or treatment of radiation injury due to exposure to ionizing radiation, including one or more compounds that regulates cell differentiation and/or cell proliferation, and one or more antioxidants, optionally formulated in a pharmaceutically acceptable carrier for an oral composition. The composition of the present invention may further include optional ingredients such as flavonoids, flavonoid derivatives, selenium, selenium compounds, anti-inflammatories, organic germanium, Korean ginseng, American ginseng, Siberian ginseng and B-complex vitamins. A method for the administration of an oral composition for the purpose of preventing, reducing or treating radiation injury involves orally administering an effective amount of a composition including one or more compounds that regulates cell differentiation and/or cell proliferation, and one or more antioxidants to a person before, during or after radiation exposure. A method for the topical administration of the composition in accordance with the present invention for the purpose of preventing, reducing or treating radiation injury involves topically administering an effective amount of the composition of the invention an area of skin, which has been or will be exposed to ionizing radiation. The compositions and methods can be employed to prevent, reduce or treat radiation injury caused by a wide variety of types of radiation

exposure.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2003:153359 USPATFULL
TITLE:	Nutritional supplements and methods for prevention, reduction and treatment of radiation injury
INVENTOR(S):	Rosenbloom, Richard A., Elkins Park, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003105027	A1	20030605
APPLICATION INFO.:	US 2002-132642	A1	20020425 (10)

RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2002-45790, filed on 14 Jan 2002, PENDING Continuation-in-part of Ser. No. US 2001-993003, filed on 6 Nov 2001, PENDING
DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	KNOBLE & YOSHIDA, EIGHT PENN CENTER, SUITE 1350, 1628 JOHN F KENNEDY BLVD, PHILADELPHIA, PA, 19103
NUMBER OF CLAIMS:	39
EXEMPLARY CLAIM:	1
LINE COUNT:	1404

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . such as quercetin may have other beneficial effects such as acting as an anti-inflammatory and maintaining the structural integrity of **ischemic** or hypoxic tissue, which may occur after radiation exposure. Exemplary flavonoids and flavonoid derivatives include 1,2,3,6-tetra-o-gallyol-β-d-glucose; 2'o-acetylacetoside; 3,3',4-tri-o-methyl-ellagic acid; 6,3',4'-trihydroxy-5,7,8-trimethoxyflavone;. . .

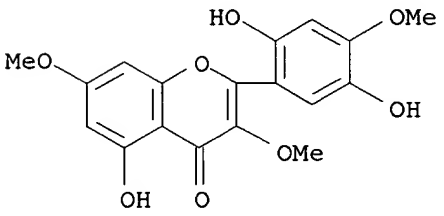
IT 50-81-7, L-Ascorbic acid, biological studies 58-95-7, Vitamin E acetate 70-18-8, Glutathione, biological studies 87-44-5, Caryophyllene 90-18-6, Quercetagetin 90-19-7, Rhamnetin 117-39-5, Quercetin 120-72-9, Indole, biological studies 137-66-6, Ascorbyl palmitate 142-50-7, Nerolidol 152-95-4, Sophoricoside 153-18-4, Rutin 303-98-0, Coenzyme Q10 446-72-0, Genistein 458-37-7, Curcumin 474-07-7, Brazilin 476-66-4, Ellagic acid 480-10-4, Astragalin 480-16-0, Morin 480-36-4, Linarin 480-40-0, Chrysin 480-41-1, Naringenin 480-44-4, Acacetin 482-36-0, Hyperin 482-39-3, Kaempferol-3-rhamnoside 483-76-1, δ-Cadinene 490-83-5, Dehydroascorbic acid 491-50-9, Quercimeritrin 491-67-8, Baicalein 491-70-3, Luteolin 491-71-4, Chrysoeriol 506-26-3, γ-Linolenic acid 517-28-2, Haematoxylin 520-11-6, Nepetin 520-12-7, Pectolinarigenin 520-18-3, Kaempferol 520-26-3, Hesperidine 520-33-2, Hesperitin 520-34-3, Diosmetin 520-36-5, Apigenin 522-12-3, Quercitrin 528-48-3, Fisetin 528-58-5, Cyanidin 529-44-2, Myricetin 548-83-4, Galangin **549-17-7**, Oxyayanin-a 549-32-6, Reynoutrin 569-90-4, Nepetrin 572-30-5, Avicularin 578-74-5, Cosmosiin 603-56-5, Chrysosplenol B 632-85-9, Wogonin 652-78-8 961-29-5, Isoliquiritigenin 1200-22-2, α-Lipoic acid 1340-08-5, Citrin 1406-18-4, Vitamin E 1617-49-8, 3,3',4-Tri-O-methylellagic acid 1617-53-4, Amentoflavone 3681-93-4, Vitexin 4172-43-4, L-Lyxonic acid 4172-44-5, L-Xylonic acid 5041-67-8, Juglanin 5041-81-6, Isoliquiritin 5188-73-8, Axillarin 5373-11-5, Luteolin-7-glucoside **6601-54-3** 7306-96-9, L-Threonic acid 7306-96-9D, L-Threonic acid, salts 7440-56-4, Germanium, biological studies 7782-49-2, Selenium, biological studies

9054-89-1, Superoxide dismutase 10236-47-2, Naringin 11103-57-4, Vitamin A 12001-76-2, Vitamin B 12758-40-6, Carboxyethylgermanium sesquioxide 17306-46-6, Rhoifolin 17680-84-1, Hispiduloside 17912-87-7 18003-33-3, 6-Hydroxyluteolin 18490-95-4, Brevifolin carboxylic acid 19356-17-3, 25-Hydroxycholecalciferol 20229-56-5, Spiraeoside 21637-25-2, Isoquercitrin 22697-65-0, 6-Hydroxykaempferol-3,6-dimethyl ether **23615-30-7**, Chrysosplenoside-a 23627-87-4, Trifolin 24512-68-3, Sorbarin 25321-00-0, Chrysosplenoside d 25694-72-8, Lonicerin 26544-34-3, Apiin 28978-02-1, Pectolinarin 29741-10-4, Luteolin 7-glucuronide 29913-71-1, Licuraside 32222-06-3, Calcitriol 32602-81-6, Kaempferol-3-neohesperidoside 53755-56-9, Linariin 60534-79-4 61276-17-3, Acteoside 61360-94-9, Flavosativaside 61891-39-2 64661-76-3 65666-07-1, Silymarin 67255-34-9, Iridine 70360-12-2, Sideritoflavone 79886-50-3 84632-09-7, 6,3',4'-Trihydroxy-5,7,8-trimethoxyflavone 94492-24-7 97560-11-7, Kolaviron 107646-82-2, Ethyl brevifolin carboxylate 120444-60-2, Jionoside a1 125712-75-6 132951-90-7, Macrocarpal-a 142628-53-3, Macrocarpal-g 142647-71-0, Macrocarpal d 142698-60-0, Macrocarpal-b 439217-49-9 524689-97-2 524727-65-9, Maniflavone 524729-83-7, Nelumboside 536737-05-0 537684-20-1, Dosmetin 537684-31-4, Ebinin
(nutritional supplements containing antioxidants and regulators of cell differentiation and/or differentiation for prevention, reduction and treatment of radiation injury)

IT **549-17-7**, Oxyayanin-a **6601-54-3 23615-30-7**, Chrysosplenoside-a
(nutritional supplements containing antioxidants and regulators of cell differentiation and/or differentiation for prevention, reduction and treatment of radiation injury)

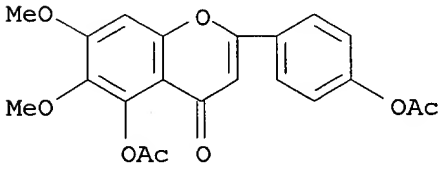
RN 549-17-7 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-(2,5-dihydroxy-4-methoxyphenyl)-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)



RN 6601-54-3 USPATFULL

CN 4H-1-Benzopyran-4-one, 5-(acetyloxy)-2-[4-(acetyloxy)phenyl]-6,7-dimethoxy- (9CI) (CA INDEX NAME)

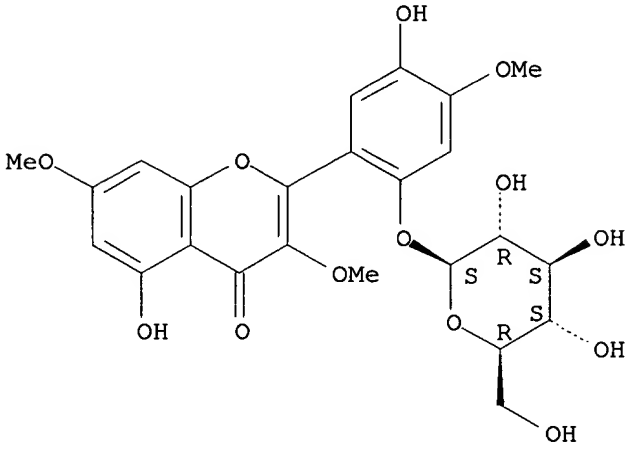


RN 23615-30-7 USPATFULL

DELACROIX

CN 4H-1-Benzopyran-4-one, 2-[2-(β-D-glucopyranosyloxy)-5-hydroxy-4-methoxyphenyl]-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 7 OF 39 USPATFULL on STN

AB An oral composition for the prevention, reduction or treatment of radiation injury including one or more compounds that regulates cell differentiation and/or cell proliferation, and one or more antioxidants, optionally formulated in a pharmaceutically acceptable carrier for an oral composition. The composition of the present invention may further include optional ingredients such as flavonoids, flavonoid derivatives, selenium, selenium compounds, anti-inflammatories, organic germanium, Korean ginseng, American ginseng, Siberian ginseng and B-complex vitamins. A method for the administration of an oral composition for the purpose of preventing, reducing or treating radiation injury involves orally administering an effective amount of a composition including one or more compounds that regulates cell differentiation and/or cell proliferation, and one or more antioxidants to a person before, during or after radiation exposure. The compositions and methods can be employed to prevent, reduce or treat radiation injury caused by a wide variety of types of radiation exposure.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2003:152288 USPATFULL
TITLE:	Oral compositions and methods for prevention, reduction and treatment of radiation injury
INVENTOR(S):	Rosenbloom, Richard A., Elkios Park, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003103954	A1	20030605
APPLICATION INFO.:	US 2002-45790	A1	20020114 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2001-993003, filed on 6 Nov 2001, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	KNOBLE & YOSHIDA, EIGHT PENN CENTER, SUITE 1350, 1628		

JOHN F KENNEDY BLVD, PHILADELPHIA, PA, 19103
NUMBER OF CLAIMS: 37
EXEMPLARY CLAIM: 1
LINE COUNT: 1221
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

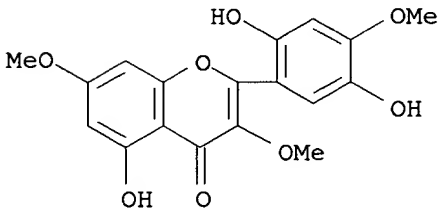
SUMM . . . such as quercetin may have other beneficial effects such as acting as an anti-inflammatory and maintaining the structural integrity of **ischemic** or hypoxic tissue, which may occur after radiation exposure. Exemplary flavonoids and flavonoid derivatives include 1,2,3,6-tetra-o-gallyol-β-d-glucose; 2'o-acetylacetoside; 3,3',4-tri-o-methyl-ellagic acid; 6,3',4'-trihydroxy-5,7,8-trimethoxyflavone;. . .

IT 50-81-7, L-Ascorbic acid, biological studies 50-81-7D, L-Ascorbic acid, glucosamine complexes 58-95-7, Vitamin E acetate 59-02-9, α-Tocopherol 67-97-0, Vitamin D3 70-18-8, Glutathione, biological studies 79-81-2, Vitamin A palmitate 87-44-5, Caryophyllene 90-18-6, Quercetagetin 90-19-7, Rhamnetin 117-39-5, Quercetin 120-72-9, Indole, biological studies 137-66-6, Ascorbyl palmitate 142-50-7, Nerolidol 152-95-4, Sophoricoside 153-18-4, Rutin 303-98-0, Coenzyme Q10 446-72-0, Genistein 458-37-7, Curcumin 474-07-7, Brazilin 476-66-4, Ellagic acid 480-10-4, Astragalin 480-16-0, Morin 480-36-4, Linarin 480-40-0, Chrysin 480-41-1, Naringenin 480-44-4, Acacetin 482-36-0, Hyperin 482-39-3, Kaempferol-3-rhamnoside 483-76-1, δ-Cadinene 491-50-9, Quercimeritrin 491-67-8, Baicalein 491-70-3, Luteolin 491-71-4, Chrysoeriol 506-26-3, γ-Linolenic acid 517-28-2, Haematoxylin 520-11-6, Nepetin 520-12-7, Pectolinarigenin 520-18-3, Kaempferol 520-26-3, Hesperidine 520-33-2, Hesperitin 520-34-3, Diosmetin 520-36-5, Apigenin 522-12-3, Quercitrin 528-48-3, Fisetin 528-58-5, Cyanidin 529-44-2, Myricetin 529-53-3, Scutellarein 548-83-4, Galangin **549-17-7**, Oxyayanin-a 549-32-6, Reynoutrin 569-90-4, Nepetrin 572-30-5, Avicularin 578-74-5, Cosmosiin 603-56-5, Chrysosplenol b 632-85-9, Wogonin 652-78-8 961-29-5, Isoliquiritigenin 1200-22-2, α-Lipoic acid 1340-08-5, Citrin 1406-18-4, Vitamin E 1617-49-8, 3,3',4-Tri-o-methylellagic acid 1617-53-4, Amentoflavone 3416-24-8D, Glucosamine, ascorbic acid complexes 3681-93-4, Vitexin 5041-67-8, Juglanin 5041-81-6, Isoliquiritin 5188-73-8, Axillarin 5373-11-5, Luteolin-7-glucoside **6601-54-3**, Diacetyl cirsmaritin 7235-40-7, β-Carotene 7782-49-2, Selenium, biological studies 9054-89-1, Superoxide dismutase 10236-47-2, Naringin 11103-57-4, Vitamin A 12001-76-2, Vitamin B 12758-40-6, Carboxyethylgermanium sesquioxide 17306-46-6, Rhoifolin 17680-84-1, Hispiduloside 17912-87-7 18003-33-3, 6-Hydroxyluteolin 18490-95-4, Brevifolin carboxylic acid 20229-56-5, Spiraeoside 21637-25-2, Isoquercitrin 22697-65-0, 6-Hydroxykaempferol-3,6-dimethyl ether **23615-30-7**, Chrysosplenoside a 23627-87-4, Trifolin 24512-68-3, Sorbarin 25321-00-0, Chrysosplenoside d 25694-72-8, Lonicerin 26544-34-3, Apiin 28978-02-1, Pectolinarin 29741-10-4, Luteolin-7-glucuronide 29913-71-1, Licuraside 32222-06-3, 1,25-Dihydroxyvitamin D3 32602-81-6, Kaempferol-3-neohesperidoside 53755-56-9, Linariin 60534-79-4, 3-Acetylquercetin 7,3',4'-trisulfate 61276-17-3, Acteoside 61360-94-9, Flavosativaside 61891-39-2 64661-76-3, Flavocannabiside 65666-07-1, Silymarin 67255-34-9, Iridine 70360-12-2, Sideritoflavone 79886-50-3 84632-09-7, 6,3',4'-Trihydroxy-5,7,8-trimethoxyflavone 94492-24-7, 2'-Acetylacteoside 97560-11-7, Kolaviron 107646-82-2, Ethyl brevifolin carboxylate 120444-60-2, Jionoside a1 125712-75-6

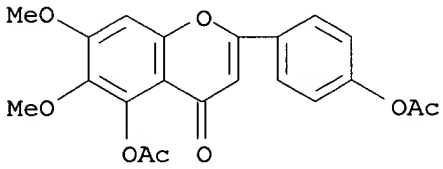
132951-90-7, Macrocarpal-a 142628-53-3, Macrocarpal-g 142647-71-0, Macrocarpal d 142698-60-0, Macrocarpal-b 439217-49-9 524689-97-2 524727-65-9, Maniflavone 524729-83-7, Nelumboside 536737-05-0 537684-20-1, Dosmetin 537684-31-4, Ebinin
(oral compns. containing antioxidant, and regulator of cell differentiation and/or proliferation for prevention, reduction and treatment of radiation injury)

IT **549-17-7**, Oxyayanin-a **6601-54-3**, Diacetyl cirsmaritin
23615-30-7, Chrysosplenoside a
(oral compns. containing antioxidant, and regulator of cell differentiation and/or proliferation for prevention, reduction and treatment of radiation injury)

RN 549-17-7 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(2,5-dihydroxy-4-methoxyphenyl)-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)

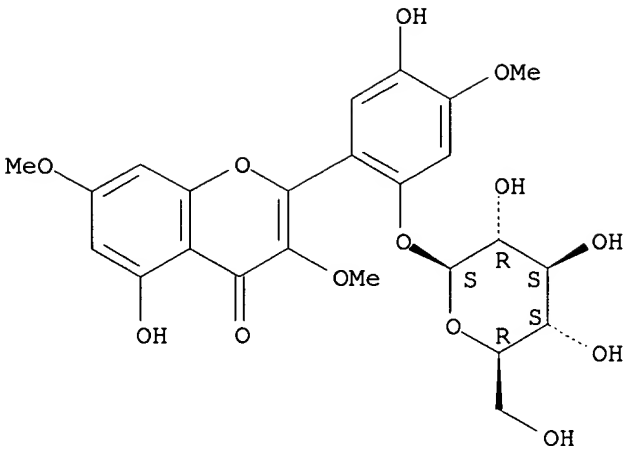


RN 6601-54-3 USPATFULL
CN 4H-1-Benzopyran-4-one, 5-(acetyloxy)-2-[4-(acetyloxy)phenyl]-6,7-dimethoxy- (9CI) (CA INDEX NAME)



RN 23615-30-7 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-[2-(β-D-glucopyranosyloxy)-5-hydroxy-4-methoxyphenyl]-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 8 OF 39 USPATFULL on STN

AB A composition for the preventing, reducing or treating radiation dermatitis includes a mixture of one or more compounds that regulates cell differentiation and/or cell proliferation, and one or more antioxidants formulated in a pharmaceutically acceptable carrier. The composition of the present invention may further include a flavonoid. A method for the topical administration of the composition in accordance with the present invention for the purpose of preventing, reducing or treating radiation dermatitis involves topically administering an effective amount of the composition of the invention an area of skin which has been or will be exposed to radiation. The composition and method can be employed to prevent, reduce or treat radiation dermatitis caused by a wide variety of types of radiation exposure and is particularly useful for the prevention, reduction or treatment of radiation recall dermatitis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2003:152287 USPATFULL
TITLE:	Composition and method for prevention, reduction and treatment of radiation dermatitis
INVENTOR(S):	Rosenbloom, Richard Allen, Elkins Park, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003103953	A1	20030605
APPLICATION INFO.:	US 2001-993003	A1	20011106 (9)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	KNOBLE & YOSHIDA, EIGHT PENN CENTER, SUITE 1350, 1628 JOHN F KENNEDY BLVD, PHILADELPHIA, PA, 19103
NUMBER OF CLAIMS:	11
EXEMPLARY CLAIM:	1
LINE COUNT:	642

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . flavonoids and/or flavonoid derivatives such as quercetin may have other beneficial effects such as anti-inflammatory and maintaining structural integrity of **ischemic** or hypoxic tissue, which may

occur after radiation exposure. Exemplary flavonoids and flavonoid derivatives include (-)-epigallocatechin; (-)-epigallocatechin-gallate; 1,2,3,6-tetra-o-gallyol-β-d-glucose; 2'o-acetylacetoside; 3,3',4-tri-o-methyl-ellagic. . .

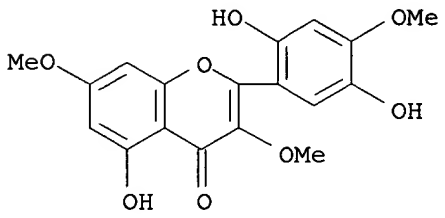
IT 50-81-7, Vitamin C, biological studies 59-02-9, α-Tocopherol 67-97-0, Vitamin D3 67-97-0D, Vitamin D3, salts 70-18-8, Glutathione, biological studies 79-81-2, Vitamin A palmitate 87-44-5, Caryophyllene 90-18-6, Quercetagetin 90-19-7, Rhamnetin 117-39-5, Quercetin 120-72-9, Indole, biological studies 137-66-6, Ascorbyl palmitate 142-50-7, Nerolidol 152-95-4, Sophoricoside 153-18-4, Rutin 303-98-0, Coenzyme Q10 434-16-2, Provitamin D3 446-72-0, Genistein 458-37-7, Curcumin 458-37-7D, Curcumin, derivs. 474-07-7, Brazilin 476-66-4, Ellagic acid 480-10-4, Astragalin 480-16-0, Morin 480-36-4, Linarin 480-40-0 480-41-1, Naringenin 480-44-4, Acacetin 482-36-0, Hyperin 482-39-3, Kaempferol-3-rhamnoside 483-76-1, δ-Cadinene 490-83-5, Dehydroascorbic acid 491-50-9, Quercimeritrin 491-67-8, Baicalein 491-70-3, Luteolin 491-71-4, Chrysoeriol 517-28-2, Hematoxylin 520-11-6, Nepetin 520-12-7, Pectolinarigenin 520-26-3, Hesperidine 520-33-2, Hesperitin 520-34-3, Diosmetin 520-36-5, Apigenin 522-12-3, Quercitrin 528-48-3, Fisetin 528-58-5, Cyanidin 529-44-2, Myricetin 529-53-3, Scutellarein 548-83-4, Galangin **549-17-7**, Oxyayanin-a 549-32-6, Reynoutrin 569-90-4, Nepetrin 572-30-5, Avicularin 578-74-5, Cosmosiin 632-85-9, Wogonin 652-78-8 961-29-5, Isoliquiritigenin 1200-22-2, α-Lipoic acid 1340-08-5, Citrin 1447-88-7 1617-49-8, 3,3',4-Tri-o-methylellagic acid 1617-53-4, Amentoflavone 3681-93-4, Vitexin 4172-43-4D, L-Lyxonic acid, salts 4172-44-5, L-Xylonic acid 4172-44-5D, L-Xylonic acid, salts 5041-67-8, Juglanin 5041-81-6, Isoliquiritin 5188-73-8, Axillarin 5373-11-5, Luteolin-7-glucoside **6601-54-3**, Diacetylcirsmaritin 7235-40-7, β-Carotene 7306-96-9, L-Threonic acid 7306-96-9D, L-Threonic acid, salts 7440-56-4D, Germanium, organic derivs. 7782-49-2, Selenium, biological studies 7782-49-2D, Selenium, compds. 9054-89-1, Superoxide dismutase 10236-47-2, Naringin 11103-57-4, Vitamin A 11103-57-4D, Vitamin A, esters 12001-76-2, Vitamin B 12758-40-6 17306-46-6, Rhoifolin 17680-84-1, Hispiduloside 17912-87-7 18003-33-3, 6-Hydroxyluteolin 18490-95-4, Brevifolin carboxylic acid 19356-17-3, 25-Hydroxycholecalciferol 20229-56-5, Spiraeoside 21637-25-2, Isoquercitrin 22697-65-0, 6-Hydroxykaempferol-3,6-dimethyl ether **23615-30-7**, Chrysosplenoside A 24512-68-3, Sorbarin 25321-00-0, Chrysosplenoside d 25694-72-8, Lonicerin 26544-34-3, Apiin 28978-02-1, Pectolinarin 29741-10-4, Luteolin-7-glucuronide 29913-71-1, Licuraside 32222-06-3, Calcitriol 32602-81-6, Kaempferol-3-neohesperidoside 33876-31-2, Trifolin 53755-56-9, Linariin 60534-79-4 61276-17-3, Acteoside 61360-94-9, Flavosativaside 61891-39-2 64661-76-3, Flavocannabiside 65666-07-1, Silymarin 67255-34-9, Iridine 70360-12-2, Sideritoflavone 72939-69-6D, Chlorophyllin, salts 79886-50-3, 1,2,3,6-Tetra-o-galloyl-β-D-glucose 82451-22-7 84632-09-7, 6,3',4'-Trihydroxy-5,7,8-trimethoxyflavone 97560-11-7, Kolaviron 107646-82-2, Ethyl brevifolin carboxylate 129932-47-4 132951-90-7, Macrocarpal-a 142628-53-3, Macrocarpal-g 142647-71-0, Macrocarpal D 142698-60-0, Macrocarpal-b 524689-97-2 524727-65-9, Maniflavone 524729-83-7, Nelumboside
(nutritional supplements and methods for prevention, reduction and treatment of radiation injury)

IT **549-17-7**, Oxyayanin-a **6601-54-3**, Diacetylcirsmaritin **23615-30-7**, Chrysosplenoside A

(nutritional supplements and methods for prevention, reduction and treatment of radiation injury)

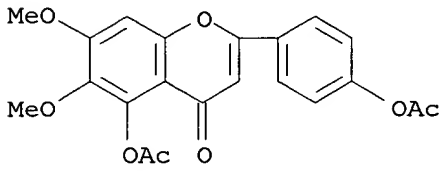
RN 549-17-7 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-(2,5-dihydroxy-4-methoxyphenyl)-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)



RN 6601-54-3 USPATFULL

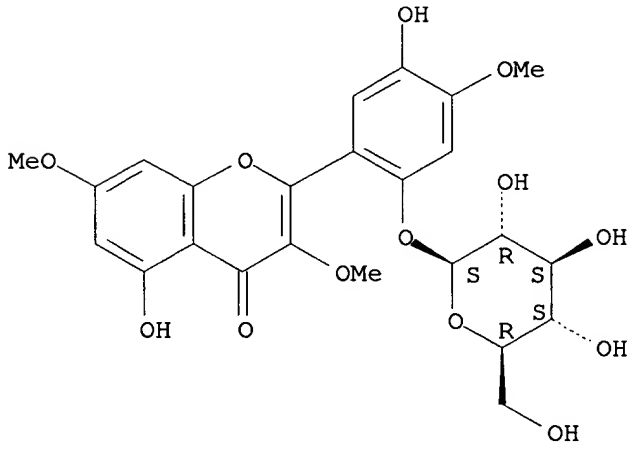
CN 4H-1-Benzopyran-4-one, 5-(acetyloxy)-2-[4-(acetyloxy)phenyl]-6,7-dimethoxy- (9CI) (CA INDEX NAME)



RN 23615-30-7 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-[2-(β-D-glucopyranosyloxy)-5-hydroxy-4-methoxyphenyl]-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 9 OF 39 USPATFULL on STN

AB A method of treating a pathological syndrome includes administration of an activated form of ultra-low doses of antibodies to an antigen,

wherein said activated form is obtained by repeated consecutive dilution combined with external impact, and the antigen is a substance or a pharmaceutical agent exerting influence upon the mechanisms of formation of this particular pathological syndrome.

Pharmaceutical agent for treating a pathological syndrome contains activated form of ultra-low doses of monoclonal, polyclonal or natural antibodies to an antigen, wherein said activated form is prepared by means of repeated consecutive dilution and external treatment, predominantly based on homeopathic technology, and said antigen is a substance or a drug acting as a direct cause of the pathological syndrome or involved in regulation of mechanisms of its formation. At that, activated forms of ultra-low doses of antibodies are raised against antigens of exogenous or endogenous origin, against autologous antigens, fetal antigens; anti-idiotypic antibodies are used too.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2003:145892 USPATFULL			
TITLE:	Curing method for pathologic syndrome and medicinal preparation			
INVENTOR(S):	Epshtein, Oleg Iliich, Kazeny, RUSSIAN FEDERATION Shtark, Mark Borisovich, Zolotodolinskaya, RUSSIAN FEDERATION Kolyadko, Tamara Mikhailovna, Shironitsev, RUSSIAN FEDERATION			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003099636	A1	20030529	
APPLICATION INFO.:	US 2002-311666	A1	20021217	(10)
	WO 2001-RU239		20010619	
	NUMBER		DATE	
PRIORITY INFORMATION:	RU 2000-115594		20000620	
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	APPLICATION			
LEGAL REPRESENTATIVE:	Ilya Zborovsky, 6 Schoolhouse Way, Dix Hills, NY, 11746			
NUMBER OF CLAIMS:	16			
EXEMPLARY CLAIM:	1			
LINE COUNT:	2894			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD [0078] A. Patient L., aged 54, presented a history of cerebral atherosclerosis and an **ischemic** stroke a month ago. He was treated with HALIDOR (1-benzyl-1-(3-dimethylaminopropoxy)-cycloheptane fumarate) in tablets (100 mg twice a day). The patient. . .

DETD [0123] F. Patient T., aged 48, with an established diagnosis of **ischemic** heart disease developed instable angina attacks at minimal physical strain. ACETYLSALICYLIC ACID (325 mg once a day) was among the. . .

DETD [0196] J. Patient A., aged 57, with an established diagnosis of hypertensive disease and **ischemic** heart disease took LABETALOL and complains of heavy breathing and dizziness. The prescription was: a mixture of a C30 dilution. . .

DETD [0197] K. Patient Ya., aged 61, with an established diagnosis of hypertensive disease and **ischemic** heart disease took APRESSIN (HYDRALAZINE) (1-hydrazinophthalazine hydrochloride) 250 mg a day in 4

doses. She complained of headaches, hot flashes,. . .

DETD [0210] R. Patient C., aged 54, with an established diagnosis of hypertensive disease, **ischemic** heart disease, angina decubitus had been taking DILTIAZEM in a dose of 40 mg 4 times a day with good. . .

DETD [0225] B. Patient U., aged 71, had been taking NITROSORBIDE (40 mg a day, 4 tablets) for 5 weeks for **ischemic** heart disease and angina of effort along with NITROGLYCEROL as needed (up to 8-10 tablets a day). Within the last. . .

DETD [0227] C. Patient G., aged 39, was admitted to hospital with the diagnosis of hypertensive disease, **ischemic** heart disease, cardiac failure due to myocardial infarction; he had been treated with intravenous infusions of SODIUM NITROPRUSSIDE (sodium nitrozylpentacyanoferrate). . .

DETD [0247] M. Patient Z., aged 55, with an established diagnosis of **ischemic** heart disease, angina of effort, atrial extrasystoles, and tachycardia (90 beats/min) had been taking 240 mg of ISOPTIN daily in. . .

DETD . . . patient's myocardial contractive capacity and hemodynamic indices were gradually improving, there appeared complaints of heartache. ECG revealed signs of myocardial **ischemia**. The treatment with a C12 dilution of potentiated antibodies to MILRINONE in a dose of 1 tablet 3 times a. . .

DETD . . . a day to be taken in the morning the patient's condition markedly improved: the ECG signs of myocardial overload and **ischemia** became less pronounced and peripheral edema disappeared. Three months of a regular intake of potentiated antibodies made it possible to. . .

DETD [0257] C. Patient F., aged 57, suffered from **ischemic** heart disease and primary hypercholesterolemia. He had been taking PRAVASTATIN for 3 months in a dose of 20 mg at. . .

DETD [0259] D. Patient P., aged 55, with an established diagnosis of **ischemic** heart disease and hypercholestrolemia had been taking ETOFIBRATE (in a dose of 500 mg once a day) following his physician's. . .

DETD [0284] B. Patient K., aged 63, complained of moderate heartaches. The diagnosis of **ischemic** heart disease was made. The oral intake (at bedtime) of 20 ml of a C30 potentiated solution of polyclonal antibodies. . . of the disease was observed. The conclusion was drawn about the efficiency of the potentiated preparation for the prevention of **ischemic** heart disease.

IT 50-02-2 50-06-6, Phenobarbital, biological studies 50-23-7, Hydrocortisone 50-28-2, Estradiol, biological studies 50-35-1, Thalidomide 50-37-3, Lsd 50-48-6, Amitriptyline 50-49-7, Imipramine 50-55-5, Reserpine 50-67-9, Serotonin, biological studies 50-78-2, Aspirin 51-41-2, Noradrenalin 51-45-6, Histamine, biological studies 51-55-8, Atropine, biological studies 51-60-5, Proserine 51-61-6, Dopamine, biological studies 51-84-3, Acetylcholine, biological studies 52-53-9, Verapamil 52-86-8, Haloperidol 53-86-1, Indomethacin 54-11-5, Nicotine 54-31-9, Furosemide 54-85-3, Isoniazid 55-63-0, Nitroglycerin 56-40-6, Glycine, biological studies 56-84-8, Aspartic acid, biological studies 56-86-0, Glutamic acid, biological studies 57-27-2, Morphine, biological studies 57-41-0, Phenytoin 57-47-6, Physostigmine 57-66-9, Probenecid 57-92-1, Streptomycin, biological studies 58-08-2, Caffeine, biological studies 58-22-0, Testosterone 58-55-9, Theophylline, biological studies 58-82-2, Bradykinin 58-93-5, Hypothiazide 59-05-2, Methotrexate 59-26-7, Cordiamine

59-43-8, Thiamin, biological studies 59-66-5, Acetazolamide 59-67-6, Nicotinic acid, biological studies 59-92-7, Levo-dopa, biological studies 60-99-1, Tisercin 64-39-1, Promedol 71-63-6, Digitoxin 71-73-8, Thiopental sodium 76-57-3, Codeine 77-10-1, Phencyclidine 86-54-4, Apressin 87-33-2, Nitrosorbide 92-84-2, Phenothiazine 97-77-8, Disulfiram 103-90-2, Paracetamol 137-58-6, Lidocaine 146-22-5, Nitrazepam 298-46-4, Tegretol 299-42-3, Ephedrine 318-98-9, Anapriline 364-62-5, Metoclopramide 437-38-7, Fentanil 439-14-5, Diazepam 443-48-1, Metronidazole 465-65-6, Naloxone 511-12-6, Dihydroergotamine 586-06-1, Orciprenaline 621-72-7, Dibazol 835-31-4, Naphthizine 982-43-4, Libexin 985-12-6, No-spa 1069-66-5, Depakin 1078-21-3, Phenibut 1134-47-0, Baclofen 1406-16-2, Vitamin d 1406-18-4, Vitamin e 1490-04-6, Menthol 1972-08-3, Tetrahydrocannabinol 2898-12-6, Mezapam 3644-61-9, Midocalm 3737-09-5, Ritmilen 3930-20-9, Sotalol 4205-91-8, Clofelin 5786-21-0, Azaleptine 6740-88-1, Ketamine 6893-02-3, Triiodothyronine **7085-55-4**, Troxerutin 7491-74-9, Nootropil 9002-72-6, Somatotropin 9004-10-8, Insulin, biological studies 9005-49-6, Heparin, biological studies 9007-12-9, Calcitonin 9007-92-5, Glucagon, biological studies 9015-82-1, Angiotensin-converting enzyme 9015-94-5, Renin, biological studies 9025-82-5, Phosphodiesterase 9035-34-1, Cytochrome a 10540-29-1, Tamoxifen 11103-57-4, Vitamin A 11128-99-7, Angiotensin ii 12656-61-0, Cerebrolysin 13292-46-1, Rifampicin 13311-84-7, Flutamide 13392-18-2, Fenoterol 14286-84-1, Halidor 14402-89-2, Sodium nitroprusside 14611-51-9, Selegiline 14769-73-4, Levamisol 14838-15-4, Norephedrine 14976-57-9, Tavegil 15307-86-5, Diclofenac 15663-27-1, Cisplatin 15687-27-1, Ibuprofen 15876-67-2, Ubretid 16110-51-3, Cromolyn 16773-42-5, Ornidazole 17479-19-5, Dihydroergocristine 18559-94-9, Salbutamol 19216-56-9, Prazosin 19774-82-4, Cordarone 20830-75-5, Digoxin 22254-24-6, Atrovent 23214-92-8, Doxorubicin 23288-49-5, Probucol 23476-83-7, Prospidine 25614-03-3, Bromocryptine 25717-80-0, Molsidomine 27236-88-0, Sodium hydroxybutyrate 28797-61-7, Pirenzepine 29122-68-7, Atenolol 31637-97-5, Etofibrate 34262-84-5 34580-13-7, Ketotifen 34580-14-8, Zaditen 36282-47-0, Tramal 36894-69-6 39391-18-9, Cyclooxygenase 42399-41-7, Diltiazem 42408-82-2, Butorphanol 51753-57-2, Phenazepam 54063-53-5, Propafenone 54739-18-3, Fluvoxamine 54910-89-3, Fluoxetine 55142-85-3, Ticlopidine 57808-66-9, Motilium 59122-46-2, Misoprostol 59467-70-8, Midazolam 62571-86-2, Captopril 62683-29-8, Colony stimulating factor 66357-35-5, Ranitidine 66829-00-3, Aminalone 71320-77-9, Moclobemide 72841-18-0, Cytochrome a3 73590-58-6, Omeprazole 75438-57-2, Moxonidine 75847-73-3, Enalapril 76824-35-6, Famotidine 79617-96-2, Sertraline 79794-75-5, Loratadine 80214-83-1, Rulid 81093-37-0, Pravastatin 82626-48-0, Zolpidem 84057-84-1, Lamotrigin 85721-33-1, Ciprofloxacin 88040-23-7, Tsefepim 96829-58-2, Orlistat 103628-46-2, Sumatriptan 106266-06-2, Risperidone 106463-17-6, Omnic 110942-02-4, Aldesleukin 111470-99-6, Norvasc 121181-53-1, Filgrastim 124750-99-8, Cozaar 142805-56-9, Topoisomerase ii 214692-62-3, Omez 383123-63-5, Detralex
(antibodies to; curative method for pathol. syndromes and homeopathic medicinal prepns.)

IT **7085-55-4**, Troxerutin
(antibodies to; curative method for pathol. syndromes and homeopathic medicinal prepns.)

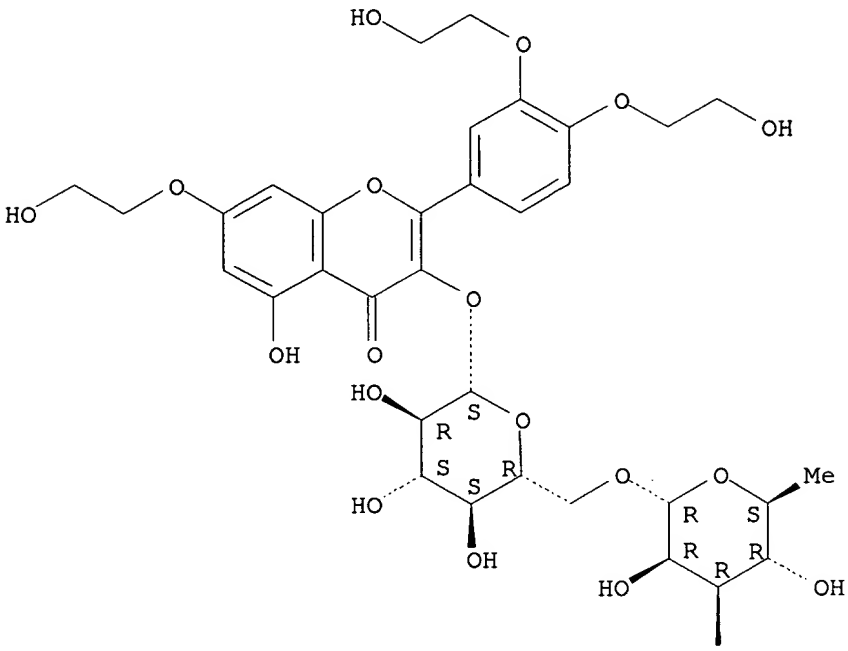
RN 7085-55-4 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-[3,4-bis(2-hydroxyethoxy)phenyl]-3-[[6-O-(6-deoxy-

α-L-mannopyranosyl)-β-D-glucopyranosyl]oxy]-5-hydroxy-7-(2-hydroxyethoxy)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

L5 ANSWER 10 OF 39 USPATFULL on STN

AB 3-Deoxyflavonoid compounds and methods for inhibiting T-cell activity and treating diseases and disorders (e.g., autoimmune disorders, inflammatory disorders, diabetes, ALS, MS, rheumatoid arthritis, etc.). In some cases the efficacy and/or duration of action of luteolin and/or other 3-dioxyflavinoid compounds may be increased by administering such compounds along with Rutin, a Rutin congener and/or a Rutin derivative. Also, in some cases, first pass metabolism of luteolin or other 3-deoxyflavinoids may be avoided by administering such compounds by parenteral routes (e.g., sublingual, buccal, intranasal, injection, etc.).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:100081 USPATFULL

TITLE: Inhibition by 3-deoxyflavonoids of T-lymphocyte activation and therapies related thereto

INVENTOR(S): Lahey, Thomas P., Laguna Niguel, CA, UNITED STATES

PATENT ASSIGNEE(S):	Rajadhyaksha, V.J., Mission Viejo, CA, UNITED STATES SynorX, Inc., San Clemente, CA, UNITED STATES, 92673 (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003069192	A1	20030410	
APPLICATION INFO.:	US 2002-236861	A1	20020906	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2001-317666P	20010906	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Robert D. Buyan, Stout, Uxa, Buyan & Mullins, LLP, Suite 300, 4 Venture, Irvine, CA, 92618
NUMBER OF CLAIMS: 37
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 1300
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . and dust asthma, bronchitis and the like. The compounds may also be useful for the treating hepatic injury associated with **ischemia**.

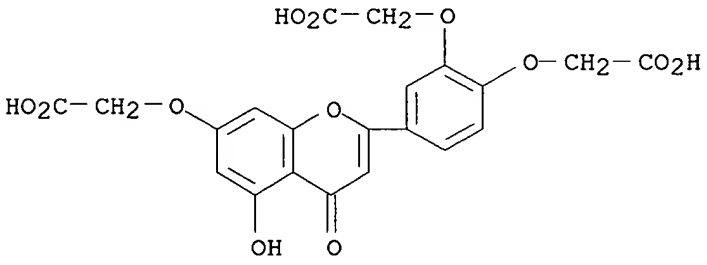
SUMM . . . treating preventing or treating inflammation of mucosa or blood vessels (such as leukotriene-mediated diseases), gastric ulcers, vascular damage caused by **ischemic** diseases and thrombosis, **ischemic** bowl diseases. Further, the invention will be useful for treating multidrug resistance of tumor cells, (i.e. enhancing the activity and/or. . .

IT **501445-13-2** 501445-14-3 501445-15-4 501445-16-5 501445-17-6 501445-18-7 501445-19-8
(3-deoxyflavonoids that inhibit T-lymphocyte activation and use in treating immune disorders and inflammatory disorders)

IT **501445-13-2**
(3-deoxyflavonoids that inhibit T-lymphocyte activation and use in treating immune disorders and inflammatory disorders)

RN 501445-13-2 USPATFULL

CN Acetic acid, 2,2'-[[4-[7-(carboxymethoxy)-5-hydroxy-4-oxo-4H-1-benzopyran-2-yl]-1,2-phenylene]bis(oxy)]bis- (9CI) (CA INDEX NAME)



L5 ANSWER 11 OF 39 USPATFULL on STN

AB Beadlets comprising xanthophylls and carotenes and/or retinoids, dietary supplements comprising these beadlets and methods of use are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2003:168830 USPATFULL
TITLE:	Stable carotene-xanthophyll beadlet compositions and methods of use
INVENTOR(S):	Lang, John C., Arlington, TX, United States
PATENT ASSIGNEE(S):	Alcon, Inc., Hunenberg, SWITZERLAND (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6582721	B1	20030624	
APPLICATION INFO.:	US 1999-397472		19990917	(9)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Dodson, Shelley A.
LEGAL REPRESENTATIVE:	Schultz, Teresa J.
NUMBER OF CLAIMS:	40
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT:	830

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . for glaucoma, and other diseases and disorders of the retina and its support tissues, particularly age related macular degeneration, retinal **ischemia**, acute retinopathies associated with trauma, post-surgical complications, the damage associated with laser therapy including photodynamic therapy (PDT), and surgical light. . . .

CLM What is claimed is:

. . . 39. A method according to claim 26, wherein the ocular diseases or disorders are glaucoma, age related macular degeneration, retinal **ischemia**, acute retinopathies associated with trauma, ocular post-surgical complications, damage associated with laser therapy including photodynamic therapy (PDT), and surgical light. . .

. . . 40. A method according to claim 38, wherein the ocular diseases or disorders are glaucoma, age related macular degeneration, retinal **ischemia**, acute retinopathies associated with trauma, ocular post-surgical complications, damage associated with laser therapy including photodynamic therapy (PDT), and surgical light. . .

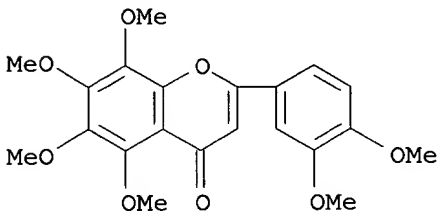
IT 57-50-1, Sucrose, biological studies 59-30-3, Folic acid, biological studies 59-67-6, Niacin, biological studies 65-23-6, Pyridoxine 68-19-9, Cyanocobalamin 79-83-4, Pantothenic acid 83-88-5, Vitamin B2, biological studies 110-44-1, Sorbic acid 117-39-5, Quercetin 127-40-2, Lutein 137-66-6, Ascorbyl palmitate 144-68-3, Zeaxanthin 153-18-4, Rutin 472-61-7, Astaxanthin 472-70-8, Cryptoxanthin 472-89-9, ε-Carotene 472-92-4, δ-Carotene 472-93-5, γ-Carotene **478-01-3**, Nobiletin 480-18-2 480-40-0, Chrysin 480-44-4, Acacetin **481-53-8**, Tangeretin 502-65-8, ψ,ψ-Carotene 514-78-3, Canthaxanthin 520-18-3, Kaempferol 520-36-5, Apigenin 532-32-1, Sodium benzoate 551-15-5, Liquiritin 557-04-0, Magnesium stearate 557-34-6, Zinc acetate 1406-18-4, Vitamin E 3211-76-5, L-Selenomethionine 4345-03-3, α-Tocopherol succinate 7235-40-7, β-Carotene 7439-96-5, Manganese, biological studies 7440-47-3, Chromium, biological studies 7440-50-8, Copper, biological studies 7440-50-8D, Copper, amino acid chelates, biological studies 7488-99-5, α-Carotene 7631-86-9, Silica, biological studies 7757-93-9, Dicalcium phosphate 7782-49-2, Selenium, biological studies 9004-65-3, Hydroxypropylmethylcellulose 9005-25-8,

Starch, biological studies 9005-65-6, Polysorbate 80 13463-67-7, Titanium dioxide, biological studies 25322-68-3, Polyethylene glycol 74811-65-7, Croscarmellose sodium
(stable carotene-xanthophyll beadlet compns. and methods of use)

IT **478-01-3**, Nobiletin **481-53-8**, Tangeretin
(stable carotene-xanthophyll beadlet compns. and methods of use)

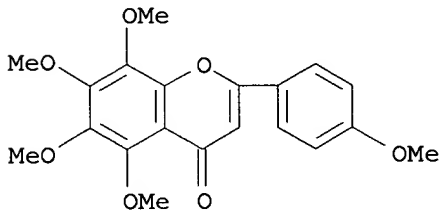
RN 478-01-3 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7,8-tetramethoxy- (9CI) (CA INDEX NAME)



RN 481-53-8 USPATFULL

CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



L5 ANSWER 12 OF 39 HCAPLUS COPYRIGHT 2004 ACS on STN

AB A composition for treatment of cerebral **ischemia** is disclosed which comprises (weight-%) yeast seleniate 10-11 (100 mg Se); Ginkgo biloba leaf extract containing 150-160 mg ginkgoflavone (ginkgetin), 3.5-4; dextrin 35-37; Me p-hydroxybenzoate 0.025-0.030; Pr p-hydroxybenzoate 0.012-0.015; magnesium stearate 0.03-0.035; and ascorbic acid 0.1-0.11. A procedure for extraction of ginkgo leaves is disclosed..

ACCESSION NUMBER:	2004:96068 HCAPLUS
DOCUMENT NUMBER:	140:117369
TITLE:	Pharmaceutical composition for treatment of cerebral **ischemia**
INVENTOR(S):	Oancea, Florin; Mihaescu, Gheorghe; Mihaescu, Octavian Aurel; Mihaescu, Florin; Mohan, Gheorghe
PATENT ASSIGNEE(S):	S.C. Ter. Um. Vet. "Hipocrate" S.R.L., Rom.
SOURCE:	Rom., 4 pp. CODEN: RUXXA3
DOCUMENT TYPE:	Patent
LANGUAGE:	Romanian
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RO 117419	B1	20020329	RO 1997-1342	19970721

PRIORITY APPLN. INFO.: RO 1997-1342 19970721

TI Pharmaceutical composition for treatment of cerebral **ischemia**

AB A composition for treatment of cerebral **ischemia** is disclosed which comprises (weight-%) yeast seleniate 10-11 (100 mg Se); Ginkgo biloba leaf extract containing 150-160 mg ginkgoflavone (ginkgetin),. . .

ST ginkgo ginkgoflavone brain **ischemia** formulation yeast seleniate

IT Ginkgo biloba
Human
(ginkgoflavone-seleniate composition for treatment of cerebral **ischemia**)

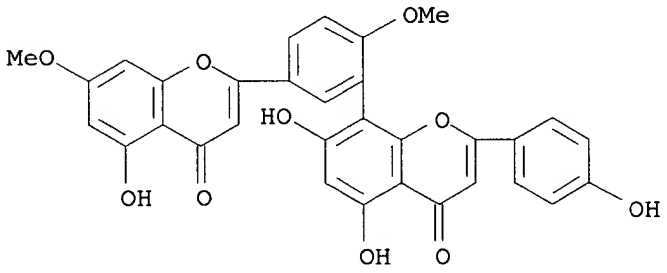
IT Brain, disease
(**ischemia**; ginkgoflavone-seleniate composition for treatment of cerebral **ischemia**)

IT **481-46-9P**, Ginkgetin 7782-49-2P, Selenium, biological studies
RL: BPN (Biosynthetic preparation); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(ginkgoflavone-seleniate composition for treatment of cerebral **ischemia**)

IT **481-46-9P**, Ginkgetin
RL: BPN (Biosynthetic preparation); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(ginkgoflavone-seleniate composition for treatment of cerebral **ischemia**)

RN 481-46-9 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-[5-(5-hydroxy-7-methoxy-4-oxo-4H-1-benzopyran-2-yl)-2-methoxyphenyl]-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



L5 ANSWER 13 OF 39 HCAPLUS COPYRIGHT 2004 ACS on STN

AB Polyalkoxyflavonoids, especially nobiletin and tangeretin, in the Rutaceae extract
are useful for control and relief of neurodegenerative diseases such as cerebral **ischemia**. Dried peel of Citrus unshiu was extracted with ethanol and nobiletin and tangeretin identified in the extract by known method. Biol. activity of the Citrus unshiu extract on the PC12 cell was shown.

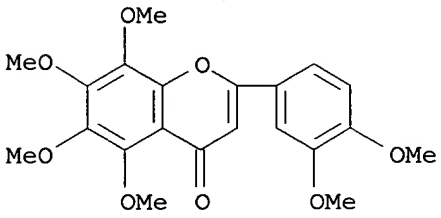
ACCESSION NUMBER: 2002:148735 HCAPLUS
DOCUMENT NUMBER: 136:164277
TITLE: **Neurite** outgrowth factor in Rutaceae extract
INVENTOR(S): Ito, Hisatomi; Tamura, Shinya; Miyazaki, Toshiji
PATENT ASSIGNEE(S): Nagase and Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002060340	A2	20020226	JP 2000-248021	20000817
US 2002040052	A1	20020404	US 2001-927038	20010809

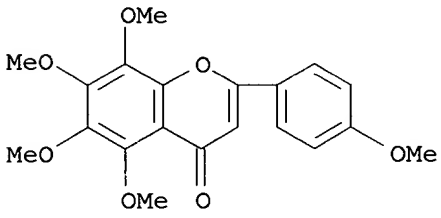
PRIORITY APPLN. INFO.: JP 2000-248021 A 20000817
OTHER SOURCE(S): MARPAT 136:164277

TI **Neurite** outgrowth factor in Rutaceae extract
AB . . . especially nobiletin and tangeretin, in the Rutaceae extract are useful for control and relief of neurodegenerative diseases such as cerebral **ischemia**. Dried peel of Citrus unshiu was extracted with ethanol and nobiletin and tangeretin identified in the extract by known method.. . .
ST Rutaceae ext **neurite** outgrowth factor neurodegenerative disease; polyalkoxyflavonoid neurodegenerative disease control Rutaceae ext
IT Nervous system, disease
(degeneration; **neurite** outgrowth agent)
IT Brain, disease
(**ischemia**; **neurite** outgrowth agent)
IT Growth factors, animal
RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**neurite** extension factors; **neurite** outgrowth agent)
IT Alzheimer's disease
Citrus depressa
Drugs
Health food
Rutaceae
Satsuma
(**neurite** outgrowth agent)
IT Flavonoids
RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(polyalkoxyflavonoids; **neurite** outgrowth agent)
IT Orange
(sour; **neurite** outgrowth agent)
IT 64-17-5, Ethanol, uses
RL: NUU (Other use, unclassified); USES (Uses)
(**neurite** outgrowth agent)
IT **478-01-3P**, Nobiletin **481-53-8P**, Tangeretin
RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**neurite** outgrowth agent)
IT **478-01-3P**, Nobiletin **481-53-8P**, Tangeretin
RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL

(Biological study); PREP (Preparation); USES (Uses)
(**neurite** outgrowth agent)
RN 478-01-3 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7,8-tetramethoxy- (9CI) (CA INDEX NAME)



RN 481-53-8 HCAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



L5 ANSWER 14 OF 39 USPATFULL on STN
AB The present invention relates to a method for therapeutically and/or prophylactically treating **ischemia** and/or the pathologies associated with **ischemia** or an energy deficit in a patient comprising administering to the patient a pharmaceutical composition comprising bilobalide and a pharmaceutically acceptable excipient where the composition has a therapeutic and/or prophylactic effect on **ischemia** and/or the pathologies associated with **ischemia** or an energy deficit.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2002:295221 USPATFULL
TITLE:	Use of a pharmaceutical composition for treating and/or preventing **ischemia**
INVENTOR(S):	Remacle, Jose, Malonne, BELGIUM Michiels, Carine, Spy, BELGIUM

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002165270	A1	20021107
APPLICATION INFO.:	US 2002-131921	A1	20020423 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000-423967, filed on 20 Mar 2000, ABANDONED A 371 of International Ser. No. WO 1998-BE67, filed on 12 May 1998, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	BE 1997-415	19970513
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	KNOBBE MARTENS OLSON & BEAR LLP, 620 NEWPORT CENTER DRIVE, SIXTEENTH FLOOR, NEWPORT BEACH, CA, 92660	
NUMBER OF CLAIMS:	4	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	4 Drawing Page(s)	
LINE COUNT:	653	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

TI Use of a pharmaceutical composition for treating and/or preventing **ischemia**

AB The present invention relates to a method for therapeutically and/or prophylactically treating **ischemia** and/or the pathologies associated with **ischemia** or an energy deficit in a patient comprising administering to the patient a pharmaceutical composition comprising bilobalide and a pharmaceutically acceptable excipient where the composition has a therapeutic and/or prophylactic effect on **ischemia** and/or the pathologies associated with **ischemia** or an energy deficit.

SUMM . . . The present invention relates to the therapeutic and/or prophylactic application of a pharmaceutical composition in the treatment and/or prevention of **ischemia** and of pathologies which are associated with **ischemia**.

SUMM [0003] Similarly, active compounds isolated from plant extracts have been used for treating the consequences of **ischemia** or pathologies associated with **ischemia**. This is the case with flavonoids, which are known to be antioxidants and which are able to limit the damage. . . is caused by the free radicals which are produced during reperfusion. Thus, when reperfusion takes place after a period of **ischemia**, a very considerable production of oxygen-derived free radicals is observed, which production will cause damage to the various constituents of the cell, which has been weakened by the period of **ischemia**, in particular by the lack of energy (ATP). This increased production of free radicals was clearly demonstrated by McCord J.. . . M. (1985, N. Engl. J. Med., 312: 159-163). It is due to xanthine oxidase being activated during the period of **ischemia** and to the very high activity of this enzyme during reperfusion. Antioxidant molecules such as the flavonoids therefore have a beneficial effect on the **ischemia** reperfusion process since they protect the tissue against this excess of free radicals (Reddy D. S. et al., 1995, Drugs. . .

SUMM . . . flavonoid type which are known for their antioxidant properties has overshadowed the possibility of these extracts or molecules having an anti-**ischemic** activity which is peculiar to them, that is which is independent of the process of reoxygenation.

SUMM [0005] The activity of the flavonoids on **ischemia** and in decreasing the impact of myocardial infarction is due to this activity in controlling the active oxygen derivatives (Reddy. . . GMBH, 1988). Troxerutin has, in particular, been used as an antioxidant molecule which protects the heart during the process of **ischemia** reperfusion (Blasug I. E. et al., 1987, Biomed. Biochim. Acta, vol. 46: 5539-544; XP 002052079 et Olszenski A. J., 1991,. . .

SUMM . . . diosmin, which blocks the formation of free radicals by

xanthine oxidase (which take [sic] place during the reperfursion after the **ischemia**), has been used in this sense as being able to protect during **ischemia** (Bouskela E. et al., 1997, 45: 33-37; Int. J. Microcirc. Clin. Exp., 1995, 15: 293-300; Debbarre B. et al., 1995,. . .

SUMM [0007] Rutosides have also been successfully tested for their anti-**ischemia** activity. Thus, they reduce the magnitude of the impact in animals which have been subjected to an arterial occlusion (Zalewski A. et al., Am. J. Cardiol., 1985, 56: 974-977), and also provide relief for patients suffering from **ischemia** of the lower limbs (Milliken J. C., Vasa, 1974, 3: 203-206).

SUMM [0009] The demonstration of this activity does not constitute an anti-**ischemic** activity as such but, instead, an action on one of the causes of thrombosis, namely aggregation of the platelets.

SUMM [0010] The present invention is directed towards providing a novel process for the therapy and/or prophylaxis of **ischemia** and/or pathologies which are associated with **ischemia**.

SUMM . . . are isolated from these compounds, and/or a mixture thereof, for preparing a medicament which is intended for treating and/or preventing **ischemia** and/or pathologies which are associated with **ischemia**.

SUMM . . . compounds of the composition according to the invention which have already been shown to have a protective capacity in the **ischemia** reperfusion process.

TABLE 2

Active compounds of the composition according to the invention which have already been shown to have a protective capacity in the **ischemia** reperfusion process

Active principle	Brand name ®	Company
Troxerutin	Veinamitol	Vitalpharma
Coumarin troxerutin	Venalot-Depot	Boots
Diosmin	Ven Dretex [sic]	Therabel
o-(hydroxyethyl). . .		

SUMM [0017] The products of the invention use this mechanism of action to protect the patient from the **ischemia** or the consequences of the **ischemia**. The active compounds and principles of the invention are therefore characterized at one and the same time by a prophylactic. . .

SUMM . . . blueberry anthocyanin extracts, which active compounds are characterized by properties which are particularly advantageous and unexpected in the treatment of **ischemia** and pathologies which are associated with **ischemia**, with an energy deficit and with deficiencies linked to ageing.

SUMM [0026] "(Partial or total) **ischemia** or pathologies associated with **ischemia**" are understood as being vascular disorders which are selected from the group consisting of myocardial infarction, cerebral **ischemia**, chronic venous insufficiency, atheriopathies, that is lesions which are due to the atheroschlerosis which affects the arteries of the patients,. . . to vasoconstriction of the arteries, ulcers, change in capillary permeability, capillary fragility, wound-healing, changes to the skin, retinal defects of **ischemic** origin, loss of auditory acuity of **ischemic** origin, disorders associated with time spent at high altitude, angina

pectoris engendered by short periods of coronary obstruction, pulmonary hypertension, hepatic **ischemia**, Parkinson's disease, myopathies and syndromes associated with vascular problems such as diabetes, where hypertension and a change in the blood flow appear in the lower limbs. These **ischemia**-linked disorders and pathologies are well known to clinicians and doctors, who can adjust the use of the pharmaceutical composition for. . .

SUMM [0030] The present invention also relates to a process for therapeutically and/or prophylactically treating the **ischemia** and/or the pathologies associated with the **ischemia** or with an energy deficit as well as the deficiencies linked to ageing, such as the intellectual failings of the. . .

DETD Effect of bilobalide on brain mitochondria in a situation of **ischemia**

DETD [0052] A 15 minute **ischemia** was performed on control rats and rats which have been treated with active compounds of the invention (bilobalides) for 14 days. The **ischemia** is performed by decapitation. The rats were treated per os with bilobalide doses of 10 mg/kg for 14 days. When the RCR is measured in the presence of glutamate/malate in the case of a 15 minute **ischemia**, an RCR of 3 is observed in the case of the controls, with an RCR of 3.9 being observed in. . . rats. The active compound therefore has a protective action on the decrease in respiratory activity which is induced by the **ischemia**. This protection is manifested through the activity of complex I and of the mitochondrial transport chain. The level of respiratory. . .

DETD . . . of rats which had been treated per os for 14 days with 10 mg of bilobalide/kg, and after a 15minute **ischemia** of the brain. An activity of 36 mU/mg of protein is obtained in the case of the control rats, whereas. . . in the case of mitochondria which are isolated from the brains of rats which have not undergone a period of **ischemia**.

DETD . . . RCR of 13.25, as compared with an RCR of 7.6 in the case of the control rats. A 10 minute **ischemia** was performed on the livers by perfusion in a medium consisting of 0.137 M NaCl, 5.4 mM KCl, 0.8 mM. . .

DETD [0057] These results demonstrate that the active compound of the invention (bilobalide) possesses an anti-**ischemic** activity which is manifested both in vitro (ECs which are subjected to hypoxia) and in vivo (hepatic and cerebral **ischemia** in treated rats), and that this activity is at least partly due to protection of the mitochondria, which increase their. . .

DETD . . . two targets is to increase the production of ATP by the mitochondria and to prevent this production from decreasing under **ischemic** conditions. Thus, the active compounds protect the cells from the consequences of an energy deficit, which deficit can, in the. . .

DETD . . . property of maintaining a high level of ATP production by the mitochondria, even under unphysiological situations such as periods of **ischemia** or of a decrease in these mitochondrial activities due to age or to pathologies associated with ageing, thereby enabling the. . .

CLM What is claimed is:

1. A method for therapeutically and/or prophylactically treating **ischemia** and/or the pathologies associated with **ischemia** or an energy deficit in a patient comprising administering to said patient a pharmaceutical composition comprising bilobalide and a

pharmaceutically acceptable excipient whereby said composition has a therapeutic and/or prophylactic effect on **ischemia** and/or the pathologies associated with **ischemia** or an energy deficit.

3. The method of claim 1 wherein said pathologies associated with **ischemia** are selected from the group consisting of myocardial infarction, cerebral **ischemia**, chronic venous insufficiency, atheriopathies, Raynaud's phenomenon, loss of auditory acuity, disorders associated with time spent at high altitude, ulcers, change. . . permeability, capillary fragility, wound-healing, changes to the skin, angina pectoris engendered by short periods of coronary obstruction, pulmonary hypertension, hepatic **ischemia**, Parkinson's disease, diabetes and heart transplants.

4. The method of claim 2 wherein said pathologies associated with **ischemia** are selected from the group consisting of myocardial infarction, cerebral **ischemia**, chronic venous insufficiency, atheriopathies, Raynaud's phenomenon, loss of auditory acuity, disorders associated with time spent at high altitude, ulcers, change. . . permeability, capillary fragility, wound-healing, changes to the skin, angina pectoris engendered by short periods of coronary obstruction, pulmonary hypertension, hepatic **ischemia**, Parkinson's disease, diabetes and heart transplants.

IT 91-64-5, Coumarin 153-18-4D, Rutoside, hydroxyethyl derivs. 520-27-4, Diosmin 531-75-9, Esculoside 3200-06-4, Praxilene 6805-41-0, Aescin **7085-55-4**, Troxerutin 8003-26-7, Esberiven 10310-32-4, Tribenoside 15687-37-3, Naftazone 24292-52-2, Hesperidin methylchalcone 33570-04-6, Bilobalide 51024-64-7, Ruscoside 55965-63-4, Venoruton 64156-26-9, Reparil
(pharmaceutical composition for treating and/or preventing ischemia and/or pathologies associated with ischemia or with energy deficiency)

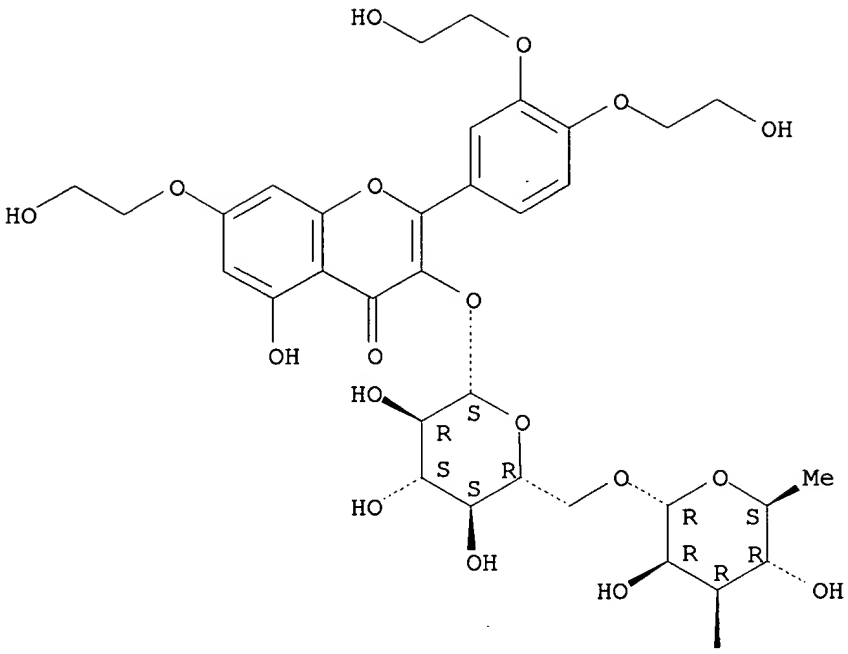
IT **7085-55-4**, Troxerutin
(pharmaceutical composition for treating and/or preventing ischemia and/or pathologies associated with ischemia or with energy deficiency)

RN 7085-55-4 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-[3,4-bis(2-hydroxyethoxy)phenyl]-3-[[6-O-(6-deoxy-α-L-mannopyranosyl)-β-D-glucopyranosyl]oxy]-5-hydroxy-7-(2-hydroxyethoxy)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

L5 ANSWER 15 OF 39 USPATFULL on STN

AB Compositions and a method for the treatment of diabetic neuropathy is disclosed. The compositions comprise a mixture of a compound that promotes synthesis of nerve growth factor, an aldose reductase inhibitor and an antioxidant, optionally formulated in a pharmaceutically acceptable carrier. This combination of active agents provides significant, effective relief of the symptoms of diabetic neuropathy, as well as at least partial recovery of lost neurological function in some cases. In addition, the compositions of the present invention, when used in effective amounts to treat diabetic neuropathy, do not exhibit the severe side effects of many prior art compositions proposed for treatment of this ailment.

In a second aspect, a method for the administration of a composition in accordance with the present invention for the treatment of diabetic neuropathy is disclosed. In the method, an effective amount of the composition of the invention is administered on a regular basis over a period of time sufficient to provide the beneficial effects of relief from the symptoms of diabetic neuropathy, as well as at least some recovery of the damaged nerve tissues.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:295161 USPATFULL
TITLE: Compositions and methods for the treatment of diabetic neuropathy
INVENTOR(S): Rosenbloom, Richard, Elkins Park, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002165207	A1	20021107
APPLICATION INFO.:	US 2001-847121	A1	20010502 (9)

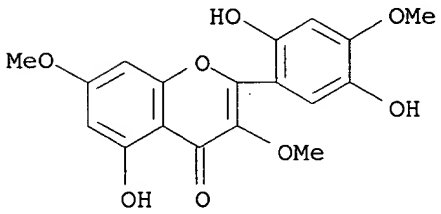
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Knoble & Yoshida, LLC, Eight Penn Center, Suite 1350, 1628 John F. Kennedy Blvd., Philadelphia, PA, 19103
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
LINE COUNT: 628
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
SUMM . . . in U.S. Pat. No. 5,840,736 (Zelle et al.). In this method, pharmaceutical compositions are disclosed for stimulating the growth of **neurites** in nerve cells. The compositions include a neurotrophic amount of a compound and a nerve growth factor. These compositions may. . .
IT 50-81-7, Ascorbic acid, biological studies 58-95-7, Vitamin E acetate 67-97-0, Vitamin D3 67-97-0D, Vitamin D3, analogs and precursors 70-18-8, Glutathione, biological studies 81-13-0, D-Panthenol 87-44-5, Caryophyllene 90-18-6, Quercetagetin 90-19-7, Rhamnetin 117-39-5, Quercetin 120-72-9, Indole, biological studies 137-66-6, Ascorbyl palmitate 142-50-7, Nerolidol 152-95-4, Sophoricoside 153-18-4, Rutin 303-98-0, Coenzyme Q10 446-72-0, Genistein 474-07-7, Brazilin 476-66-4, Ellagic acid 480-10-4, Astragalin 480-16-0, Morin 480-36-4, Linarin 480-40-0, Chrysin 480-41-1, Naringenin 480-44-4, Acacetin 482-36-0, Hyperin 482-39-3, Kaempferol-3-rhamnoside 483-76-1, δ-Cadinene 491-50-9, Quercimeritrin 491-67-8, Baicalein 491-70-3, Luteolin 491-71-4, Chrysoeriol 501-15-5, Epinin 517-28-2, Haematoxylin 520-11-6, Nepetin 520-12-7, Pectolinarigenin 520-18-3, Kaempferol 520-26-3, Hesperidine 520-33-2, Hesperitin 520-34-3, Diosmetin 520-36-5, Apigenin 522-12-3, Quercitrin 528-48-3, Fisetin 528-58-5, Cyanidin 529-44-2, Myricetin 529-53-3, Scutellarein 548-83-4, Galangin **549-17-7**, Oxyayanin-a 549-32-6, Reynoutrin 569-90-4, Nepitrin 572-30-5, Avicularin 578-74-5, Cosmosiin 632-85-9, Wogonin 652-78-8 961-29-5, Isoliquiritigenin 970-74-1, (-)-Epigallocatechin 989-51-5, (-)-Epigallocatechin-3-gallate 1200-22-2, α-Lipoic acid 1340-08-5, Citrin 1617-49-8, 3,3',4-Tri-o-methylellagic acid 1617-53-4, Amentoflavone 3681-93-4, Vitexin 5041-67-8, Juglanin 5041-81-6, Isoliquiritin 5188-73-8, Axillarin 5373-11-5, Luteolin-7-glucoside **6601-54-3** 10236-47-2, Naringin 11103-57-4, Vitamin A 16485-10-2, DL-Panthenol 17306-46-6, Rhoifolin 17680-84-1, Hispiduloside 17912-87-7, Myricitrin 18003-33-3, 6-Hydroxyluteolin 18490-95-4, Brevifolin carboxylic acid 20229-56-5, Spiraeoside 21637-25-2, Isoquercitrin 22697-65-0, 6-Hydroxykaempferol-3,6-dimethyl ether **23615-30-7**, Chrysosplenoside-a 23627-87-4, Trifolin 24512-68-3, Sorbarin 25321-00-0, Chrysosplenoside d 25694-72-8, Lonicerin 26544-34-3, Apiin 28978-02-1, Pectolinarin 29741-10-4, Luteolin-7-glucuronide 29913-71-1, Licuraside 32222-06-3, 1,25-Dihydroxyvitamin D3 32602-81-6, Kaempferol-3-neohesperidoside 53755-56-9, Linariin

60534-79-4 61276-17-3, Acteoside 61360-94-9, Flavosativaside 61891-39-2 64661-76-3, Flavocannabiside 65666-07-1, Silymarin 67255-34-9, Iridine 70360-12-2, Sideritoflavone 73428-17-8, Manniflavanone 79886-50-3 84632-09-7, 6,3',4'-Trihydroxy-5,7,8-trimethoxyflavone 94492-24-7, 2'-Acetylacteoside 97560-11-7, Kolaviron 102865-36-1, Methyl scutellarate 107091-01-0, Neriumoside 107646-82-2, Ethyl brevifolin carboxylate 125712-75-6 132951-90-7, Macrocarpal-a 142628-53-3, Macrocarpal-g 142647-71-0, Macrocarpal d 142698-60-0, Macrocarpal-b 167678-65-1 439217-49-9
(compns. containing nerve growth factor promoters, aldose reductase inhibitors and antioxidants for treatment of diabetic neuropathy)

IT **549-17-7**, Oxyayanin-a **6601-54-3 23615-30-7**,
Chrysosplenoside-a
(compns. containing nerve growth factor promoters, aldose reductase inhibitors and antioxidants for treatment of diabetic neuropathy)

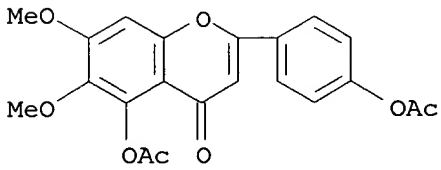
RN 549-17-7 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-(2,5-dihydroxy-4-methoxyphenyl)-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)



RN 6601-54-3 USPATFULL

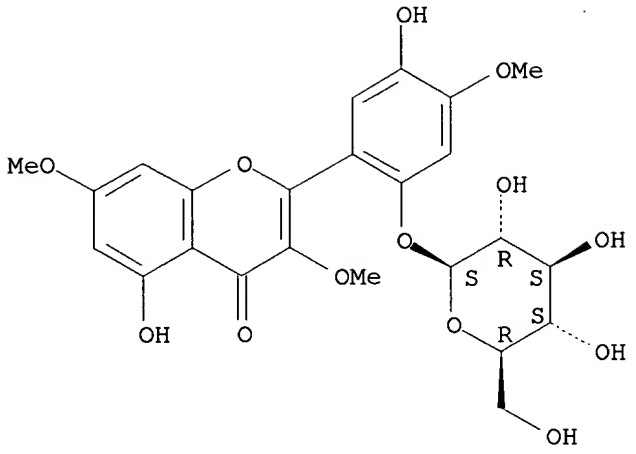
CN 4H-1-Benzopyran-4-one, 5-(acetyloxy)-2-[4-(acetyloxy)phenyl]-6,7-dimethoxy- (9CI) (CA INDEX NAME)



RN 23615-30-7 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-[2-(β-D-glucopyranosyloxy)-5-hydroxy-4-methoxyphenyl]-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 16 OF 39 USPATFULL on STN

AB A method and composition for the treatment of diabetic neuropathy is disclosed. The composition comprises a cold compounded mixture of a compound that promotes synthesis of nerve growth factor, an aldose reductase inhibitor and an antioxidant formulated in a pharmaceutically acceptable carrier. It has been found that this combination of active agents provides significant, effective relief of the symptoms of diabetic neuropathy, as well as at least partial recovery of lost neurological function in some cases. In view of the consensus in the art that effective combinations of various active agents have not been demonstrated to be effective for the treatment of diabetic neuropathy, the present invention provides a surprising and unexpected effect. In addition, the topical compositions of the present invention, when used in effective amounts to treat diabetic neuropathy, do not exhibit the severe side effects of many prior art compositions proposed for treatment of this ailment,

In a second aspect, a method for the topical administration of a composition in accordance with the present invention for the treatment of diabetic neuropathy is disclosed. In the method, an effective amount of the composition of the invention is topically administered to the areas of the body that have been adversely affected by the diabetic neuropathy on a regular basis over a period of time sufficient to provide the beneficial effects of relief from the symptoms and at least some recover of the damaged nerve tissues.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2002:214230 USPATFULL			
TITLE:	Method and composition for the topical treatment of diabetic neuropathy			
INVENTOR(S):	Rosenbloom, Richard Allen, Elkins Park, PA, UNITED STATES			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002115618	A1	20020822	
	US 6555573	B2	20030429	
APPLICATION INFO.:	US 2000-740811	A1	20001221	(9)

DELACROIX

09/927,038

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KNOBLE & YOSHIDA, EIGHT PENN CENTER, SUITE 1350, 1628 JOHN F KENNEDY BLVD, PHILADELPHIA, PA, 19103
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
LINE COUNT: 666
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . is disclosed in U.S. Pat. No. 5,840,736 (Zelle et al.). In this method, pharmaceutical compositions for stimulating the growth of **neurites** in nerve cells comprising a neurotrophic amount of a compound and a nerve growth factor. These compositions may be administered. . .

IT 50-81-7, Ascorbic acid, biological studies 58-95-7, Vitamin E acetate 67-97-0, Vitamin D3 67-97-0D, Vitamin D3, analogs and precursors 70-18-8, Glutathione, biological studies 81-13-0, D-Panthenol 87-44-5, Caryophyllene 90-18-6, Quercetagetin 90-19-7, Rhamnetin 117-39-5, Quercetin 120-72-9, Indole, biological studies 137-66-6, Ascorbyl palmitate 142-50-7, Nerolidol 152-95-4, Sophoricoside 153-18-4, Rutin 303-98-0, Coenzyme Q10 446-72-0, Genistein 474-07-7, Brazilin 476-66-4, Ellagic acid 480-10-4, Astragalin 480-16-0, Morin 480-36-4, Linarin 480-40-0, Chrysin 480-41-1, Naringenin 480-44-4, Acacetin 482-36-0, Hyperin 482-39-3, Kaempferol-3-rhamnoside 483-76-1, δ-Cadinene 491-50-9, Quercimeritrin 491-67-8, Baicalein 491-70-3, Luteolin 491-71-4, Chrysoeriol 501-15-5, Epinin 517-28-2, Haematoxylin 520-11-6, Nepetin 520-12-7, Pectolinarigenin 520-18-3, Kaempferol 520-26-3, Hesperidine 520-33-2, Hesperitin 520-34-3, Diosmetin 520-36-5, Apigenin 522-12-3, Quercitrin 528-48-3, Fisetin 528-58-5, Cyanidin 529-44-2, Myricetin 529-53-3, Scutellarein 548-83-4, Galangin **549-17-7**, Oxyayanin-a 549-32-6, Reynoutrin 569-90-4, Nepitrin 572-30-5, Avicularin 578-74-5, Cosmosiin 632-85-9, Wogonin 652-78-8 961-29-5, Isoliquiritigenin 970-74-1, (-)-Epigallocatechin 989-51-5, (-)-Epigallocatechin-3-gallate 1200-22-2, α-Lipoic acid 1340-08-5, Citrin 1617-49-8, 3,3',4-Tri-o-methylellagic acid 1617-53-4, Amentoflavone 3681-93-4, Vitexin 5041-67-8, Juglanin 5041-81-6, Isoliquiritin 5188-73-8, Axillarin 5373-11-5, Luteolin-7-glucoside **6601-54-3** 10236-47-2, Naringin 11103-57-4, Vitamin A 16485-10-2, DL-Panthenol 17306-46-6, Rhoifolin 17680-84-1, Hispiduloside 17912-87-7, Myricitrin 18003-33-3, 6-Hydroxyluteolin 18490-95-4, Brevifolin carboxylic acid 20229-56-5, Spiraeoside 21637-25-2, Isoquercitrin 22697-65-0, 6-Hydroxykaempferol-3,6-dimethyl ether **23615-30-7**, Chrysosplenoside-a 23627-87-4, Trifolin 24512-68-3, Sorbarin 25321-00-0, Chrysosplenoside d 25694-72-8, Lonicerin 26544-34-3, Apiin 28978-02-1, Pectolinarin 29741-10-4, Luteolin-7-glucuronide 29913-71-1, Licuraside 32222-06-3, 1,25-Dihydroxyvitamin D3 32602-81-6, Kaempferol-3-neohesperidoside 53755-56-9, Linariin 60534-79-4 61276-17-3, Acteoside 61360-94-9, Flavosativaside 61891-39-2 64661-76-3, Flavocannabiside 65666-07-1, Silymarin 67255-34-9, Iridine 70360-12-2, Sideritoflavone 73428-17-8, Manniflavanone 79886-50-3 84632-09-7, 6,3',4'-Trihydroxy-5,7,8-trimethoxyflavone 94492-24-7, 2'-Acetylacteoside 97560-11-7, Kolaviron 102865-36-1, Methyl scutellarate 107091-01-0, Neriumoside 107646-82-2, Ethyl brevifolin carboxylate 125712-75-6 132951-90-7, Macrocarpal-a 142628-53-3, Macrocarpal-g 142647-71-0, Macrocarpal d 142698-60-0, Macrocarpal-b 167678-65-1 439217-49-9

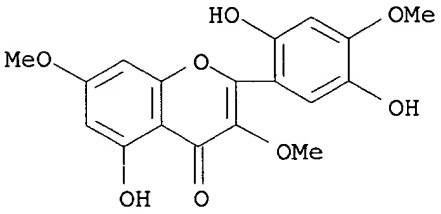
DELACROIX

(compns. containing nerve growth factor promoters, aldose reductase inhibitors and antioxidants for treatment of diabetic neuropathy)

IT **549-17-7**, Oxyayanin-a **6601-54-3 23615-30-7**, Chrysosplenoside-a
(compns. containing nerve growth factor promoters, aldose reductase inhibitors and antioxidants for treatment of diabetic neuropathy)

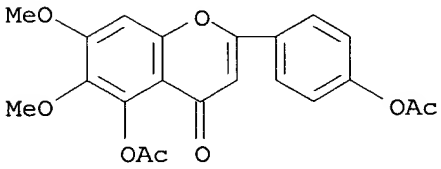
RN 549-17-7 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-(2,5-dihydroxy-4-methoxyphenyl)-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)



RN 6601-54-3 USPATFULL

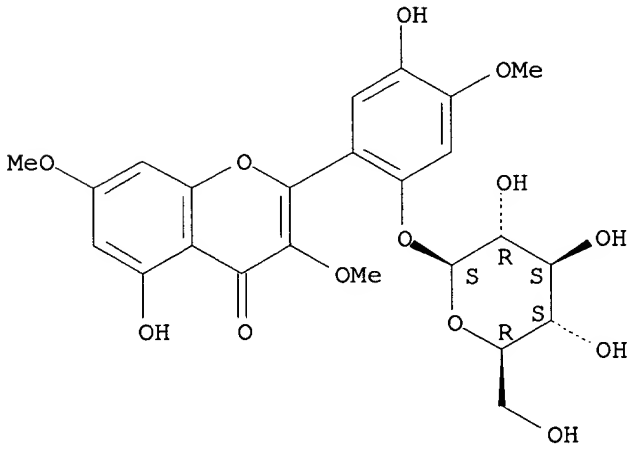
CN 4H-1-Benzopyran-4-one, 5-(acetyloxy)-2-[4-(acetyloxy)phenyl]-6,7-dimethoxy- (9CI) (CA INDEX NAME)



RN 23615-30-7 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-[2-(β-D-glucopyranosyloxy)-5-hydroxy-4-methoxyphenyl]-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 17 OF 39 USPATFULL on STN

AB The present invention relates to methods for extending **neurites**, using a composition containing a polyalkoxyflavonoid having a specific structure, especially nobiletin or tangeretin. It is found that also a composition containing an extract from a plant belonging to the citrus family has an activity to extend **neurites**. These compositions are useful to prevent and/or improve or treat neurodegeneration diseases such as Alzheimer's dementia and **encephalic ischemia** by accelerating extension of **neurites**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:72912 USPATFULL
TITLE: Method for **neurite** outgrowth
INVENTOR(S): Ito, Hisatomi, Kobe, JAPAN
Tamura, Shinya, Kobe, JAPAN
Miyazaki, Toshitsugu, Kobe, JAPAN

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002040052	A1	20020404	
APPLICATION INFO.:	US 2001-927038	A1	20010809	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-248021	20000817

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: AMIN & TUROCY, LLP, 1900 EAST 9TH STREET, NATIONAL CITY CENTER, 24TH FLOOR,, CLEVELAND, OH, 44114
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
LINE COUNT: 701

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

TI Method for **neurite** outgrowth

AB The present invention relates to methods for extending **neurites**, using a composition containing a polyalkoxyflavonoid having a specific structure, especially nobiletin or tangeretin. It is found that also a composition containing an extract from a plant belonging to the citrus family has an activity to extend **neurites**. These compositions are useful to prevent and/or improve or treat neurodegeneration diseases such as Alzheimer's dementia and **encephalic ischemia** by accelerating extension of **neurites**.

SUMM [0002] The present invention relates to methods for extending **neurites** of **neurocytes** and compositions having **neurite** extending effect. More specifically, the present invention relates to methods for preventing and/or improving or treating neurodegeneration diseases such as Alzheimer's dementia and cerebral **ischemia** by accelerating **neurite** extension, and compositions for extending **neurites** that are useful for these methods.

SUMM [0006] In recent years, neurotrophical factors secreted from **neurocytes** such as nerve growth factors (NGF) have been found to exhibit excellent effects on neurodegeneration diseases and have attracted public. . . the peripheral nerves, and of magnocellular cholinergic neuron in the central nerves. An NGF also acts to prevent degeneration of **neurocytes** when the brain is damaged. In this

regard, raising the NGF level in a living body seems to be effective. . .

SUMM . . . inhibitory effect. Japanese Laid-Open Patent Publication (Tokkai) No.6-31627 has reported that alcoholic extracts of ginseng have an activating effect on **neurocytes**, but the substance that has the activating effect has not been specified.

SUMM . . . Therefore, with the foregoing in mind, it is an object of the present invention to provide a method for extending **neurites** of **neurocytes** without any side effects, and a method for preventing and/or treating neurodegeneration diseases using novel compositions having **neurite** extending effect.

SUMM [0013] The present invention provides a method for extending **neurites** including administering a composition to a subject, the composition including a polyalkoxyflavonoid represented by Formula 1, and a pharmaceutically acceptable. . .

SUMM [0015] The present invention also provides a method for extending **neurites** including administering a composition to a subject, the composition including an extract of a plant belonging to the citrus family,. . .

SUMM [0019] The present invention further provides a method for extending **neurites** including bringing a composition in contact with **neurocytes**, the composition including a polyalkoxyflavonoid represented by Formula 1 and a physiologically acceptable carrier: ##STR3##

SUMM [0021] The present invention further provides a method for extending **neurites** including bringing a composition in contact with **neurocytes**, the composition including an extract of a plant belonging to the citrus family and a physiologically acceptable carrier.

SUMM . . . the present invention, the present invention provides a composition that is a pharmaceutical composition or a quasi-drug composition for extending **neurites** or for preventing and/or treating neurodegeneration diseases and contains a polyalkoxyflavonoid represented by Formula 1 or an extract from a. . .

SUMM [0026] The present invention also provides a composition that is a food composition for extending **neurites** or preventing and/or treating neurodegeneration diseases and contains a polyalkoxyflavonoid represented by Formula 1 or an extract from a plant. . .

SUMM [0028] The present invention further provides a composition that is a composition for cell treatment to extend **neurites** of **neurocytes** and contains a polyalkoxyflavonoid represented by Formula 1 or an extract from a plant belonging to the citrus family, and. . .

SUMM [0032] According to the present invention, a composition that is highly safe and has excellent **neurite** extending effect on cells can be provided, and therefore, a method for extending **neurites** and a method for preventing and/or treating neurodegeneration diseases are provided. In particular, it is effective to use a composition containing nobiletin or tangeretin that is a polyalkoxyflavonoid as an active ingredient. The composition for extending **neurites** of the present invention can be used as a pharmaceutical, a quasi-drug or a food, and are effective to extend **neurites** and to prevent and/or treat neurodegeneration diseases such as Alzheimer's dementia and **encephalic ischemia**.

SUMM [0034] It is known that PC12 cells derived from adrenal medulla pheochromocytoma of rats extend **neurites** in response to NGFs. The inventors of the present invention examined various substances having NGF-like activities, using an evaluation system. . . a result,

the inventors of the present invention discovered that a polyalkoxyflavonoid having a specific chemical structure exhibits an excellent **neurite** extending effect.

SUMM [0035] In the present invention, "a composition for extending **neurites**" refers to a composition containing extracts of plants belonging to the citrus family or a composition containing a polyalkoxyflavonoid as. . .

SUMM . . . less, more preferably about 30% by weight or less. If the polyalkoxyflavonoid content is less than 0.00001% by weight, the **neurite** extending effect may not reach the desired level. On the other hand, if the content exceeds 50% by weight, better. . .

SUMM [0056] By using the compositions of the present invention obtained in the above-described manner, it is possible to extend **neurites** or prevent and/or treat neurodegeneration diseases.

SUMM . . . for example in vitro, by culturing cells in a medium containing the composition for cell treatment of the present invention, **neurite** extension of the cells can be observed. In vivo, by orally administrating the pharmaceutical composition of the present invention, **neurite** extension is accelerated, and furthermore, the prevention and/or treatment of neurodegeneration diseases such as Alzheimer's dementia and **encephalic ischemia** can be expected. The dose of the composition of the present invention, both in vitro and in vivo, can be. . .

DETD . . . the above substances nobiletin and tangeretin was used without any further treatment as a test material A (composition for extending **neurites**).

DETD . . . microscopic observation was conducted with respect to the cells at 200 times magnification. The percentage of the cells with extended **neurites** (cells that have **neurites** longer than their diameter) to the total of more than 200 cells was calculated. The results are shown in Table. . .

DETD [0070] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except that PC12 cells were transferred to the DEMEM-TIP medium. . .

DETD [0073] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except that the extract from Citrus depressa was used without. . .

DETD [0074] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 3 except that PC12 cells were transferred to the DEMEM-TIP medium. . .

DETD [0077] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except that the extract from Citrus aurantium was used without. . .

DETD [0078] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 5 except that PC12 cells were transferred to the DEMEM-TIP medium. . .

DETD [0079] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except that nobiletin obtained in Example 1 was used without. . .

DETD [0080] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except for using nobiletin obtained in Example 1 was used. . .

DETD [0081] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except that nobiletin obtained in Example 1 was used without. . .

DETD [0082] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except that tangeretin

obtained in Example 1 was used without. . .

DETD [0083] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except tangeretin obtained in Example 1 was used without any. . .

DETD [0084] The percentage of the cells with extended **neurites** was calculated in the same as in Example 1 except that PC12 cells were transferred to the DEMEM-TIP medium that. . .

DETD [0085] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except that dibutyl cyclic (manufactured by Sigma Inc.) that has been reported to have **neurite** extending effect (Neurochem. Int. 33, 503, (1999)) was used without any further treatment as a test material F instead of. . .

DETD [0086] The percentage of the cells with extended **neurites** was calculated in the same manner as in Example 1 except that isobutylmethylxanthine (manufactured by Sigma Inc.) that has been reported to have **neurite** extending effect (J. Neurobiol. 19 (8), 681, (1988)) was used without any further treatment as a test material G instead. . . Ratio of of the ratio of

	Active ingredient in the test material	a composition for extending **neurites** of the present invention in the medium	the cells with ex-tended **neurites** (%)	the cells with extended **neurites** to control (Com. Ex. 1).sup.1)
Ex. 1	extract of immature peel of Citrus. . .	10 μg/ml	10.2	2.9
Ex. 3	xanthine	100 μM	11.8	3.4

.sup.1) Relative value is the value obtained by dividing "the percentage of the cells with extended **neurites**" by the control value (Comparative Example 1).

DETD . . . of Comparative Example 1, all of the test materials A to E used in Examples 1 to 11 have excellent **neurite** extending effect to cells. According to the results of Examples 1 to 11, the higher concentration the test materials that are added to the cells have, the greater the **neurite** extending effect is. These values are equivalent or more than the results of test materials F and G known to have **neurite** extending activity in Comparative Examples 2 and 3. From this regard, it is evident that all of the test materials A to E used in Examples 1 to 11 are useful as compositions for extending **neurites**.

CLM What is claimed is:

1. A method for extending **neurites** comprising administering a composition to a subject, the composition comprising a polyalkoxyflavonoid represented by Formula 1, and a pharmaceutically acceptable. . .

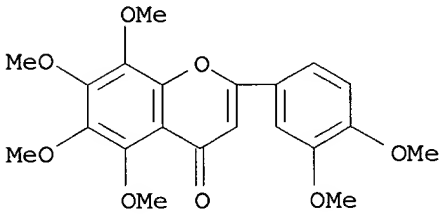
3. A method for extending **neurites** comprising administering a composition to a subject, the composition comprising an extract from a plant belonging to the citrus family,. . .

11. A method for extending **neurites** comprising bringing a composition in contact with **neurocytes**, the composition comprising a polyalkoxyflavonoid represented by Formula 1, and a physiologically acceptable carrier: ##STR13## wherein R.sub.1 is H or.

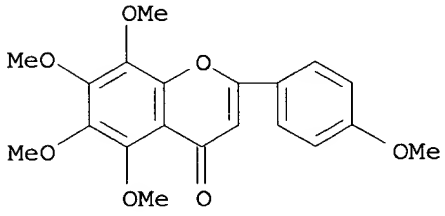
. .

13. A method for extending **neurites** comprising bringing a composition in contact with **neurocytes**, the composition comprising an extract from a plant belonging to the citrus family, and a physiologically acceptable carrier.

IT **478-01-3P**, Nobiletin **481-53-8P**, Tangeretin
(neurite outgrowth agent)
IT **478-01-3P**, Nobiletin **481-53-8P**, Tangeretin
(neurite outgrowth agent)
RN 478-01-3 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7,8-tetramethoxy- (9CI)
(CA INDEX NAME)



RN 481-53-8 USPATFULL
CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI)
(CA INDEX NAME)



L5 ANSWER 18 OF 39 USPATFULL on STN
AB Methods, products and compositions are provided which, when administered to a mammal, including humans, raises HDL serum cholesterol levels, while typically also lowering the ratio of LDL to HDL serum cholesterol levels. An effective amount of one or more of a monoterpene, a terpene and a flavonoid are included in the treatment composition.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2002:12571 USPATFULL
TITLE:	MODIFICATION OF CHOLESTEROL CONCENTRATIONS WITH CITUS PHYTOCHEMICALS
INVENTOR(S):	MCGILL, CARLA R., SARASOTA, FL, UNITED STATES GREEN, NANCY R., BRADENTON, FL, UNITED STATES

NUMBER	KIND	DATE

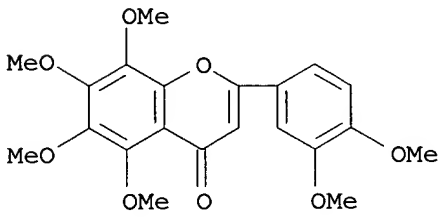
PATENT INFORMATION: US 2002006953 A1 20020117
APPLICATION INFO.: US 1999-435304 A1 19991105 (9)
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: COOK ALEX MCFARRON MANZO, CUMMINGS & MEHLER LTD, 200 WEST ADAMS STREET, SUITE 2850, CHICAGO, IL, 60606
NUMBER OF CLAIMS: 54
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 796
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . in HDL.sub.2 but no changes in HDL.sub.3 in individuals with coronary heart disease. Gofman J W, Young W, Tyandy R. **Ischemic** heart disease, atherosclerosis, and longevity.

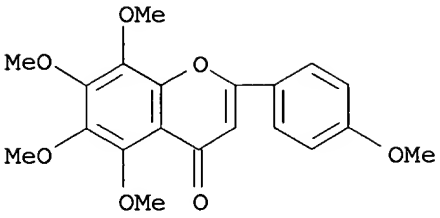
IT 50-81-7, Vitamin c, biological studies 59-30-3D, Folic acid, derivs. 138-86-3, Limonene **478-01-3**, Nobiletin 480-41-1, Naringenin **481-53-8**, Tangeretin 520-26-3, Hesperidin 520-33-2, Hesperetin 751-03-1, Obacunone 989-61-7, Liminol 1063-77-0, Nomilin **1168-42-9**, Tetra-O-methylscutellarein 1180-71-8, Limonin 1180-71-8D, Limonin, derivs. **2306-27-6**, Sinensetin 3264-90-2, Deacetylnomilin 5989-27-5, D-Limonene **7741-47-1** 10236-47-2, Naringin 13463-28-0, Eriocitrin 14259-46-2, Narirutin 14259-47-3, Didymin 14941-08-3, Poncirin 35606-75-8, Deoxylimonic acid 119279-30-0 123564-61-4, Limonin-17-O-β-D-glucoside 123564-62-5 123564-64-7 125107-16-6, Deacetylnomilic-17-O-β-D-glucoside 129477-06-1
(modification of cholesterol concns. with citrus phytochems.)

IT **478-01-3**, Nobiletin **481-53-8**, Tangeretin **1168-42-9**, Tetra-O-methylscutellarein **2306-27-6**, Sinensetin **7741-47-1**
(modification of cholesterol concns. with citrus phytochems.)

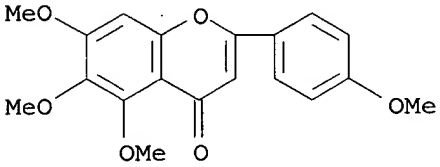
RN 478-01-3 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7,8-tetramethoxy- (9CI) (CA INDEX NAME)



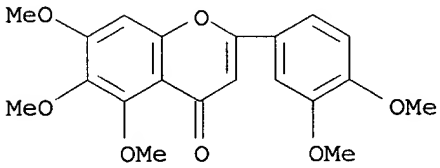
RN 481-53-8 USPATFULL
CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



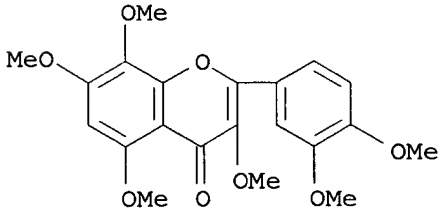
RN 1168-42-9 USPATFULL
CN 4H-1-Benzopyran-4-one, 5,6,7-trimethoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 2306-27-6 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7-trimethoxy- (9CI) (CA INDEX NAME)



RN 7741-47-1 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-3,5,7,8-tetramethoxy- (9CI) (CA INDEX NAME)



L5 ANSWER 19 OF 39 USPATFULL on STN
AB A method is provided for therapeutic use of a class of compounds that are effective in protecting nerve cells from deterioration and cell death arising from degenerative disease, trauma or aging and may be used to achieve a similar effect in male and female subjects with minimal

adverse side effects. The method comprises administering a therapeutically effective dose of a natural or synthetic bioflavonoid that acts as an MAPK cascade antagonist. Examples of bioflavonoids that may be used in the present method are apigenin and 2-(2'-amino-3' methoxyphenyl)-oxanaphthalen-4-one (PD098059).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2002:239045 USPATFULL		
TITLE:	Neuroprotective effects of mitogen-activated protein kinase (MAPK) cascade inhibitors		
INVENTOR(S):	Baskys, Andrius, 10 Cool Brook, Irvine, CA, United States 92612		

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6451837	B1	20020917	
APPLICATION INFO.:	US 2000-653065		20000901	(9)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 1999-151955P	19990901	(60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Gitomer, Ralph
ASSISTANT EXAMINER:	Khare, Devesh
LEGAL REPRESENTATIVE:	Cummings & Lockwood LLC
NUMBER OF CLAIMS:	11
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT:	797

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . dementia (alcohol induced dementia); age related dementia; age associated memory impairment; brain cell loss due to head trauma, stroke, hypoglycemia, **ischemia**, anoxia, hypoxia, cerebral edema, arteriosclerosis, hematoma or epilepsy; spinal cord cell loss due to any of the conditions listed under. . .

SUMM . . . referred to as "excitotoxicity." Excitotoxicity is thought to be important in the pathogenesis of several neurodegenerative disorders, including stroke and **ischemic** injury. Excitotoxicity has been studied in vivo and in vitro, including in organotypic hippocampal explant preparations. Excitotoxicity is caused by. . . kinase C ("PKC"). It has been shown that inhibition or reduction of PKC formation protects against nerve cell death following **ischemia**.

SUMM . . . multitude of mechanisms including cell differentiation and response to injury. PKC is abundant in neurons. It has been established that **ischemia** affects PKC activity and distribution. **Ischemic** nerve cell death has been associated with induction of PKC-delta isozyme. This effect can be blocked by NMDA inhibitors. Increased PKC-gamma immunoreactivity following incomplete **ischemia** has been found in the hippocampus. It has been shown that NMDA receptor stimulation can trigger PKC-gamma and beta isozyme. . .

SUMM Exposure of cells to stress activates protein kinases by a variety of mechanisms. For example, **ischemia**, NMDA and amyloid peptides activate MAPK. Studies of functional roles of MAPKs in nerve tissue suggest that MAPK could be. . .

SUMM Alzheimer's Disease (AD) is a progressive neurodegenerative disease

which is histologically characterized by an accumulation of **neuritic** plaques and neurofibrillary tangles and by neuron death. A major component of these **neuritic** plaques is the β-protein, which is derived from a precursor protein called the β-amyloid precursor protein (APP). The β-amyloid protein. . .

DETD Cardell M. and Wieloch T. Time course of the translocation and inhibition of protein kinase C during complete cerebral **ischemia** in the rat. J. Neurochem., 61,1308, 1993.

DETD Choi, D. W. and Rothman, S. M., The role of glutamate neurotoxicity in hypoxiic **ischemic** neuronal death, Annu. Rev. Neurosci., 13, 171, 1990.

DETD . . . N, Aftabuddin M., Moriwaki A and Hori Y. Immunocytochemical distribution of gamma isoform of protein kinase C (PKC-gamma) following incomplete **ischemia**. Indian J. Physiol. Pharmacol., 39, 37, 1995.

DETD . . . J., Kang Y., Xu E. and Schleien C. L. Mitogen-activated protein (MAP) kinase activity during and after transient focal cerebral **ischemia** in rats. Soc. Neurosci. Abs., 24 Pt. 1),223, 1998.

DETD . . . R. C. and Coyle T. J. Delayed protection by MK-801 and tetrodotoxin in a rat organotypic hippocampal culture model of **ischemia**. Stroke, 25, 457, 1994.

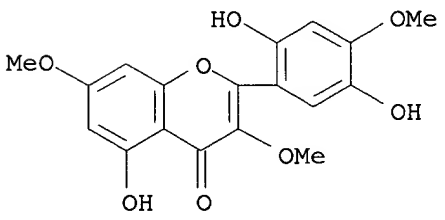
DETD Zablocka B and Domanska-Janik K. Involvement of protein kinase C in various cellular systems transducting **ischemia** evoked signal. Acta Neurobiol. Exp., 53, 25, 1993.

IT 90-19-7, Rhamnetin 117-39-5, Quercetin 153-18-4, Rutin 480-19-3, Isorhamnetin 482-36-0, Hyperin 482-38-2, Kaempferitrin 491-70-3, Luteolin 520-18-3, Pelargidenon 520-36-5 522-12-3, Quercitrin **549-17-7**, Oxyayanin-A 578-74-5, Cosmosiine 6601-62-3, Cirsimaritin 16290-07-6, Kaempferol-7-glucoside 17306-46-6, Rhoifolin 18003-33-3, 6-Hydroxyluteolin 21637-25-2, Isoquercitrin 21967-41-9, Baicalin 26046-94-6, Plantaginin 26544-34-3, Apiin 167869-21-8, PD098059 461015-55-4, Cossmetiin 461015-56-5, Sorbavin 461015-71-4, Afrelin
(neuroprotective effects of mitogen-activated protein kinase (MAPK) cascade inhibitors)

IT **549-17-7**, Oxyayanin-A
(neuroprotective effects of mitogen-activated protein kinase (MAPK) cascade inhibitors)

RN 549-17-7 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-(2,5-dihydroxy-4-methoxyphenyl)-5-hydroxy-3,7-dimethoxy- (9CI) (CA INDEX NAME)



L5 ANSWER 20 OF 39 USPATFULL on STN

AB These and other objects of this invention are achieved by providing a novel method and compositions for the clinical treatment of chronic

inflammatory diseases. This invention involves use of systemically administered compositions which include primary amine derivatives of benzoic acid as carbonyl trapping agents. These primary therapeutic agents act by chemically binding to and sequestering the aldehyde and/or ketone products of lipid peroxidation. Increased levels of lipid peroxidation have been repeatedly demonstrated as a part of the non-enzymatic "inflammatory cascade" process which underlies the secondary etiology of chronic inflammatory diseases. p-Aminobenzoic acid (or PABA) is an example of the primary therapeutic agent of the present invention. PABA has a small molecular weight, is water soluble, has a primary amine group that reacts with carbonyl-containing metabolites under physiological conditions and is tolerated by the body in relatively high dosages and for extended periods. The carbonyl sequestering agents are used in combination with at least one co-agent so as to produce an additional beneficial physiological effect of an anti-inflammatory nature. Such compositions are administered systemically entirely via the oral route. Co-agents of the present invention include anti-oxidants and free radical trapping compounds (e.g., α-tocopherol), compounds having indirect anti-oxidant activity (e.g., selenium), vitamins (e.g., pyridoxine HCl), compounds which facilitate kidney drug elimination (e.g., glycine), metabolites at risk of depletion (e.g., pantothenic acid), sulfhydryl containing chemicals (e.g., methionine), compounds which facilitate glutathione activity (e.g., N-acetylcysteine), and non-absorbable polyamine co-agents (e.g., chitosan).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:224270 USPATFULL

TITLE: Methods of treating chronic inflammatory diseases using carbonyl trapping agents

INVENTOR(S): Shapiro, Howard K., 214 Price Ave., Apt. F-32, Narberth, PA, United States 19072

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6444221	B1	20020903
APPLICATION INFO.:	US 1999-416120		19991012 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-473786, filed on 7 Jun 1995, now abandoned Continuation-in-part of Ser. No. US 1992-906909, filed on 30 Jun 1992, now abandoned

DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Kulkosky, Peter F.

ASSISTANT EXAMINER: Di Nola-Baron, Liliana

NUMBER OF CLAIMS: 26

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)

LINE COUNT: 2400

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

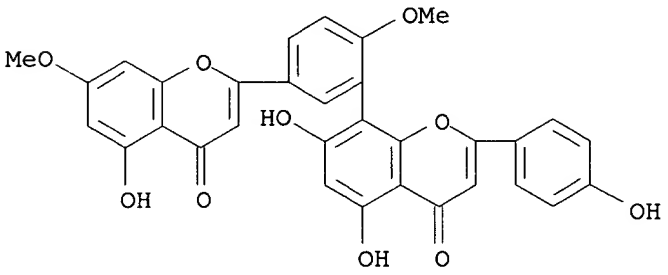
SUMM . . . glutathione and red blood cell glutathione (Bernard, 1991), and to induce a 100-fold increase in myocardial glutathione subsequent to experimental **ischemia** and reperfusion (Ferrari and coworkers, 1991). N-Acetylcysteine reacts with hypochlorous acid, HO.sup.- and H.sub.2O.sub.2 (Bernard, 1991), as well as with. . .

IT 50-14-6, Vitamin D2 52-90-4, Cysteine, biological studies 54-47-7, Pyridoxal 5-phosphate 54-86-4, Nicotinic acid sodium salt 56-40-6,

Glycine, biological studies 56-40-6D, Glycine, derivs. 58-05-9, Folinic acid 58-85-5, Biotin 58-95-7, α-Tocopherol acetate 59-02-9, α-Tocopherol 59-30-3, Folic acid, biological studies 59-43-8, Thiamine, biological studies 59-58-5, Thiamine propyl disulfide 59-67-6, Nicotinic acid, biological studies 60-23-1, Cysteamine 63-68-3, L-Methionine, biological studies 65-22-5, Pyridoxal hydrochloride 65-23-6, Pyridoxine 66-72-8, Pyridoxal 67-97-0, Vitamin D3 68-19-9, Cyanocobalamin 70-18-8, Glutathione, biological studies 74-31-7, N,N'-Diphenyl-p-phenylenediamine 77-92-9, Citric acid, biological studies 79-17-4D, Aminoguanidine, polysaccharide derivs. 79-83-4, Pantothenic acid 83-68-1, Vitamin K6 83-69-2, Vitamin K7 83-70-5, Vitamin K5 83-88-5, Riboflavin, biological studies 85-87-0, Pyridoxamine 91-53-2, Ethoxyquin 91-86-1, η-Tocopherol 98-92-0, Niacinamide 113-00-8D, Guanidine, polysaccharide derivs. 116-31-4, Retinal 117-39-5, Quercetin 118-92-3, Vitamin L1 119-13-1, δ-Tocopherol 121-79-9, Propyl gallate 127-47-9, Retinyl acetate 128-37-0, Butylated hydroxytoluene, biological studies 130-24-5 130-40-5 137-08-6, Pantothenic acid calcium salt 148-03-8, β-Tocopherol 150-13-0, PABA 153-18-4, Rutin 302-79-4, Retinoic acid 327-97-9, Chlorogenic acid 404-86-4, Capsaicin 432-70-2, α-Carotene 444-27-9, Timonacic 446-72-0, Genistein 458-37-7, Curcumin 462-20-4, Dihydrolipoic acid 472-93-5, γ-Carotene 476-66-4, Ellagic acid 480-16-0, Morin 480-19-3, Isorhamnetin **481-46-9**, Ginkgetin 490-23-3, ε-Tocopherol 493-35-6, ζ2-Tocopherol 502-65-8, Lycopene 511-28-4, Vitamin D4 520-18-3, Kaempferol 520-36-5, Apigenin 521-32-4, Bilobetin 524-36-7, Pyridoxamine dihydrochloride 528-48-3, Fisetin 529-96-4, Pyridoxamine phosphate 532-11-6, Sulfarlem 533-31-3, Sesamol 541-15-1, Carnitine 548-19-6, Isoginkgetin 552-66-9, Daidzin 616-91-1, N-Acetylcysteine 752-56-7, Riboflavin tetrabutyrate 867-81-2 1115-84-0, Vitamin U 1166-52-5, Dodecylgallate 1195-16-0 1200-22-2, α-Lipoic acid 1398-61-4D, Chitin, derivs. 1406-18-4, Vitamin E 1492-18-8, Folinic acid calcium salt 1721-51-3, ζ1-Tocopherol 1948-33-0, tert-Butylhydroquinone 2457-80-9, Vitamin L2 2487-39-0, Vitamin K-S(II) 2766-51-0, Methylmethionine sulfonium bromide 3040-38-8, Acetyl-L-carnitine 3570-15-8, Nicotinic acid monoethanolamine salt 5913-70-2 5934-25-8, Vitamin K6 dihydrochloride 5934-26-9, Vitamin K7 hydrochloride 6027-13-0, Homocysteine 7235-40-7, β-Carotene 7616-22-0, γ-Tocopherol 7782-49-2, Selenium, biological studies 9004-34-6D, Cellulose, derivs. 9012-76-4D, Chitosan, derivs. 11032-49-8, Vitamin K2 11103-57-4, Vitamin A 11104-38-4, Vitamin K1 13345-51-2D, Prostaglandin B1, oligomers 13422-55-4 19771-63-2 20554-84-1, Parthenolide 23288-49-5, Probucol 25013-16-5, Butylated hydroxyanisole 25486-55-9, Vitamin K1 oxide 58456-91-0, 2-Aminomethyl-4-tert-butyl-6-iodophenol 59937-28-9, Malotilate 64224-21-1, Oltipraz 65666-07-1, Silymarin 69425-13-4, 2,6-Di-tert-butyl-4-(2'-thenoyl)phenol 75060-92-3 77699-47-9, Herbimycin 100827-28-9, Erbstatin 125697-92-9, Lavendustin A 150977-36-9, Bromelain
(methods of treating chronic inflammatory diseases using primary amine derivs. of benzoic acid as carbonyl trapping agents and combination with other agents)

IT **481-46-9**, Ginkgetin
(methods of treating chronic inflammatory diseases using primary amine derivs. of benzoic acid as carbonyl trapping agents and combination with other agents)

RN 481-46-9 USPATFULL
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-[5-(5-hydroxy-7-methoxy-4-oxo-4H-1-benzopyran-2-yl)-2-methoxyphenyl]-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



L5 ANSWER 21 OF 39 HCAPLUS COPYRIGHT 2004 ACS on STN
AB Beadlets comprising xanthophylls and carotenes and/or retinoids, dietary supplements comprising these beadlets and methods of use are disclosed.
ACCESSION NUMBER: 2001:208119 HCAPLUS
DOCUMENT NUMBER: 134:236643
TITLE: Stable carotene-xanthophyll beadlet compositions and methods of use
INVENTOR(S): Lang, John C.
PATENT ASSIGNEE(S): Alcon Universal Ltd., Switz.
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001019383	A1	20010322	WO 2000-US24439	20000906
W: AU, BR, CA, JP, MX, TR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6582721	B1	20030624	US 1999-397472	19990917
EP 1212071	A1	20020612	EP 2000-959942	20000906
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
JP 2003516720	T2	20030520	JP 2001-523015	20000906
BR 2000014087	A	20030729	BR 2000-14087	20000906
US 6716447	B1	20040406	US 2002-88188	20020314

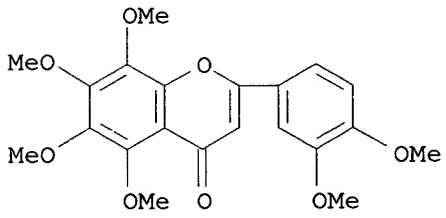
PRIORITY APPLN. INFO.: US 1999-397472 A 19990917
WO 2000-US24439 W 20000906

IT Eye, disease
(retina, **ischemia**; stable carotene-xanthophyll beadlet compns. and methods of use)
IT 57-50-1, Sucrose, biological studies 59-30-3, Folic acid, biological studies 59-67-6, Niacin, biological studies 65-23-6, Pyridoxine 68-19-9, Cyanocobalamin 79-83-4, Pantothenic acid 83-88-5, Vitamin B2, biological studies 110-44-1, Sorbic acid 117-39-5, Quercetin

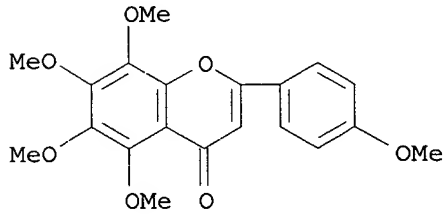
127-40-2, Lutein 137-66-6, Ascorbyl palmitate 144-68-3, Zeaxanthin 153-18-4, Rutin 472-61-7, Astaxanthin 472-70-8, Cryptoxanthin 472-89-9, ε-Carotene 472-92-4, δ-Carotene 472-93-5, γ-Carotene **478-01-3**, Nobiletin 480-18-2 480-40-0, Chrysin 480-44-4, Acacetin **481-53-8**, Tangeretin 502-65-8, ψ,ψ-Carotene 514-78-3, Canthaxanthin 520-18-3, Kaempferol 520-36-5, Apigenin 532-32-1, Sodium benzoate 551-15-5, Liquiritin 557-04-0, Magnesium stearate 557-34-6, Zinc acetate 1406-18-4, Vitamin E 3211-76-5, L-Selenomethionine 4345-03-3, α-Tocopherol succinate 7235-40-7, β-Carotene 7439-96-5, Manganese, biological studies 7440-47-3, Chromium, biological studies 7440-50-8, Copper, biological studies 7440-50-8D, Copper, amino acid chelates, biological studies 7488-99-5, α-Carotene 7631-86-9, Silica, biological studies 7757-93-9, Dicalcium phosphate 7782-49-2, Selenium, biological studies 9004-65-3, Hydroxypropylmethylcellulose 9005-25-8, Starch, biological studies 9005-65-6, Polysorbate 80 13463-67-7, Titanium dioxide, biological studies 25322-68-3, Polyethylene glycol 74811-65-7, Croscarmellose sodium
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stable carotene-xanthophyll beadlet compns. and methods of use)

IT **478-01-3**, Nobiletin **481-53-8**, Tangeretin
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stable carotene-xanthophyll beadlet compns. and methods of use)

RN 478-01-3 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7,8-tetramethoxy- (9CI) (CA INDEX NAME)



RN 481-53-8 HCAPLUS
CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 22 OF 39 USPATFULL on STN

AB Polyhydroxylated aromatic compounds, and compositions containing them, are useful for the treatment of amyloidosis, especially Alzheimer's disease, and for the treatment of diseases characterized by α-synuclein fibril formation, especially Lewy body disease and Parkinson's disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:218540 USPATFULL
TITLE: Polyhydroxylated aromatic compounds for the treatment of amyloidosis and alpha-synuclein fibril diseases
INVENTOR(S): Castillo, Gerardo M., Seattle, WA, United States
Choi, Paula Y., Bothell, WA, United States
Snow, Alan D., Lynnwood, WA, United States

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001047032	A1	20011129
APPLICATION INFO.:	US 2000-748748	A1	20001226 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-173958P	19991230 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HELLER EHRMAN WHITE & MCAULIFFE LLP, 275 MIDDLEFIELD ROAD, MENLO PARK, CA, 94025-3506
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
LINE COUNT: 1536

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . example, Alzheimer's disease patients in mid-to-late stage disease have abundant Aβ-containing amyloid deposits in their brains as part of both **neuritic** plaques and cerebrovascular amyloid deposits. A compound capable of causing disassembly/disruption of pre-existing amyloid deposits would be advantageous for use. . .

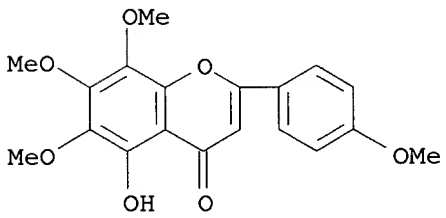
IT 51-61-6, Dopamine, biological studies 59-92-7, Dopa, biological studies 72-48-0, Alizarin 77-95-2, Quinic acid 81-61-8, Quinalizarin 82-12-2, Rufigallol 82-83-7, Puberulonic acid 83-85-2, Fuscin 87-88-7, Chloranilic acid 90-18-6, Quercetagetin 90-19-7, Rhamnetin 99-11-6, Citrazinic acid 99-23-0, Puberulic acid 117-12-4, Anthrarufin 117-39-5, Quercetin 118-76-3, Rhodizonic acid 121-79-9, Propyl gallate 128-68-7, Phenicin 148-25-4, Chromotropic acid 149-45-1, Tiron 149-91-7, Gallic acid, biological studies 152-84-1, Ruberythric acid 153-18-4, Rutin 154-23-4, Catechin 301-19-9, Robinin 305-01-1, Esculetin 319-89-1, Tetroquinone 437-50-3, Gentisin 446-72-0, Genistein 475-25-2, Hematein 475-54-7, Oosporein 478-43-3, Rhein 478-60-4, Citromycetin 480-15-9, Datiscetin 480-16-0, Morin 480-17-1, Leucocyanidin 480-40-0, Chrysin 480-44-4, Acacetin 481-74-3, Chrysophanic acid 484-89-9, Fumigatin 486-35-1, Daphnetin 489-32-7, Icariin 490-46-0, Epicatechin 491-45-2, Phloroglucide 491-50-9, Quercimeritrin 491-58-7, Chrysarobin 491-67-8, Baicalein 491-70-3, Luteolin 497-75-6, Dioxethedrine 499-14-9, Chondrosine 501-15-5, Deoxyepinephrine 517-82-8, Echinochrome a 517-88-4, Alkannin 517-92-0, Chrysamminic acid 518-82-1, Emodin 519-34-6, Maclurin 520-18-3, Kaempferol 520-27-4,

Diosmin 520-34-3, Diosmetin 520-36-5, Apigenin 524-30-1, Fraxin 528-21-2, Gallacetophenone 528-48-3, Fisetin 528-50-7, Cellobiose 528-53-0, Delphinidin 528-58-5, Cyanidin 529-53-3, Scutellarein 531-58-8, Cichoriin 533-73-3, 1,2,4-Benzenetriol 536-08-3, Digallic acid 548-80-1, Chromotrope 2B 548-83-4, Galangin 550-24-3, Embelin 552-21-6, Methylenedigallic acid 552-58-9, Eriodictyol 568-02-5, Alizarin blue 568-93-4, Alizarin orange 569-77-7, Purpurogallin 574-84-5, Fraxetin 577-33-3, Anthrarobin 578-74-5, Apigetrin 602-64-2, Anthragallol 602-92-6, Dibromogallic acid 618-73-5, Gallamide 831-61-8, Ethyl gallate 970-73-0, Gallocatechin 970-74-1, Epigallocatechin 1143-38-0, Anthralin 1260-17-9, Carminic acid 1397-77-9, Actinorhodine 1403-56-1, Fomecin a 1404-52-0, Rhodomycin b 1471-96-1, Echinochrome a 1562-85-2, Gallocyanine 1702-77-8, Fusarubin 1927-04-4, 5-Hydroxydopamine 2103-64-2, Gallein 2611-67-8, Cyanidin 3,5-diglucoside **2798-20-1**, Gardenin b 3101-51-7, Ergoflavin 4589-33-7, Bostrycoidin 5908-63-4, Baptigenin 7084-24-4, Cyanidin 3-glucoside **7085-55-4**, Troxerutin 10140-70-2, Curvularin 13405-60-2, β Glucogallin 15979-35-8, Laccaic acid a 16545-11-2, Guamecycline 16790-41-3, Fomecin b 17249-00-2, Laccaic acid b 18376-31-3, Cyanidin 3-sophoroside 18499-84-8, Laccaic acid d 18499-92-8, Kermesic acid 18719-76-1, Cyanidin 3-rhamnoglucoside 19879-06-2, Granaticin 20004-62-0, Resistomycin 20725-03-5, Fustin 20830-81-3, Daunorubicin **21187-73-5**, Gardenin a 21637-25-2, Isoquercitrin 23214-92-8, Doxorubicin 23241-56-7, Laccaic acid c 23444-65-7, Alkannin 23651-95-8, Droxidopa 23666-50-4, Rhodomycin a 27267-69-2, Collinomycin 27613-78-1, Alizarinsulfonic acid 28860-95-9, Carbidopa **29202-00-4**, Gardenin d **29550-05-8**, Gardenin c **29550-07-0**, Gardenin e 35595-03-0, Centaurein 36413-60-2, Quinic acid 38820-68-7, Cyanidin 3-sophoroside 42927-70-8, Apiose 50935-04-1, Carubicin 52479-85-3, Exifone 53318-36-8, α Glucogallin 67227-56-9, Fenoldopam 71628-96-1, Menogaril 75775-33-6, Purpurin 80455-68-1, Fredericamycin a 97689-87-7, Tunichrome B1 349584-11-8
(polyhydroxylated aromatic compds. for the treatment of amyloidosis and α-synuclein fibril diseases)

IT **2798-20-1**, Gardenin b **7085-55-4**, Troxerutin **21187-73-5**, Gardenin a **29202-00-4**, Gardenin d **29550-05-8**, Gardenin c **29550-07-0**, Gardenin e
(polyhydroxylated aromatic compds. for the treatment of amyloidosis and α-synuclein fibril diseases)

RN 2798-20-1 USPATFULL

CN 4H-1-Benzopyran-4-one, 5-hydroxy-6,7,8-trimethoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

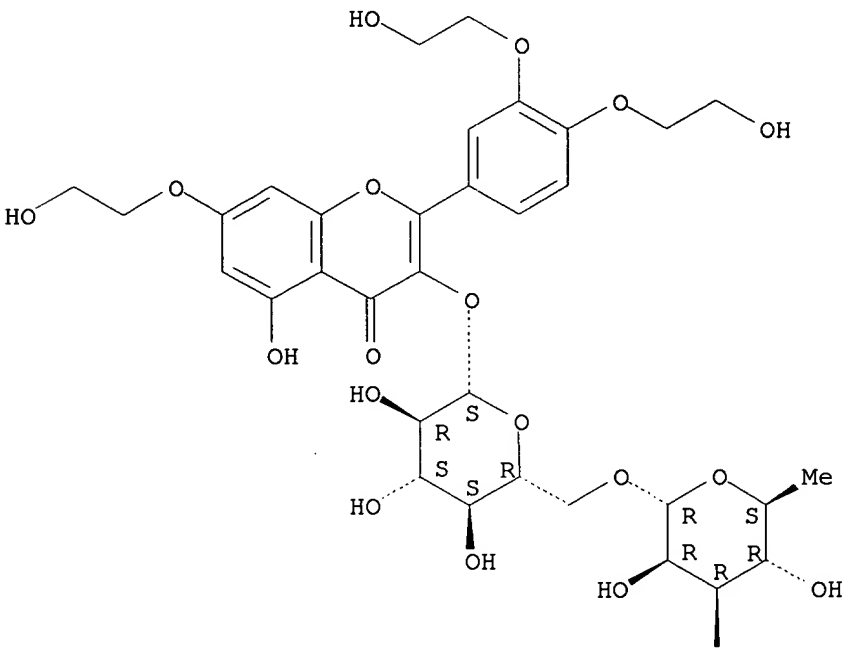


RN 7085-55-4 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-[3,4-bis(2-hydroxyethoxy)phenyl]-3-[[6-O-(6-deoxy-α-L-mannopyranosyl)-β-D-glucopyranosyl]oxy]-5-hydroxy-7-(2-hydroxyethoxy)- (9CI) (CA INDEX NAME)

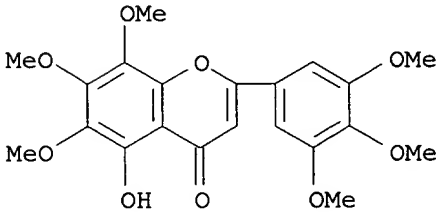
Absolute stereochemistry.

PAGE 1-A



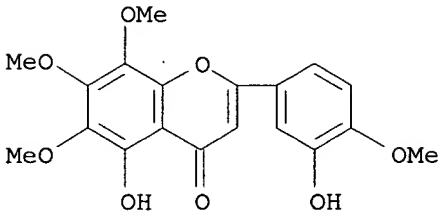
PAGE 2-A

RN 21187-73-5 USPATFULL
CN 4H-1-Benzopyran-4-one, 5-hydroxy-6,7,8-trimethoxy-2-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)

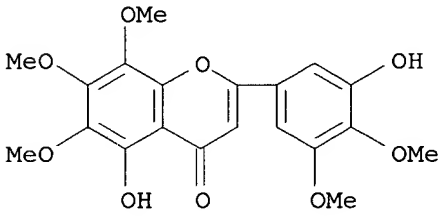


RN 29202-00-4 USPATFULL
CN 4H-1-Benzopyran-4-one, 5-hydroxy-2-(3-hydroxy-4-methoxyphenyl)-6,7,8-

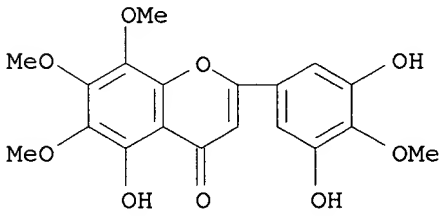
trimethoxy- (9CI) (CA INDEX NAME)



RN 29550-05-8 USPATFULL
CN 4H-1-Benzopyran-4-one, 5-hydroxy-2-(3-hydroxy-4,5-dimethoxyphenyl)-6,7,8-trimethoxy- (9CI) (CA INDEX NAME)



RN 29550-07-0 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(3,5-dihydroxy-4-methoxyphenyl)-5-hydroxy-6,7,8-trimethoxy- (9CI) (CA INDEX NAME)



L5 ANSWER 23 OF 39 USPATFULL on STN
AB A pharmaceutical composition for inhibiting COX-2 biosynthesis comprising a therapeutically effective amount of the compound of formula I and a pharmaceutrically acceptable carrier. ##STR1##

wherein R.sup.1 and R.sup.4 represent either Hydrogen or together a bond

R.sup.5, R.sup.6, R.sup.7, R.sup.8 represent independently of each other Hydrogen, Hydroxy or Methoxy; in addition R.sup.7 represents a sugar substituent like glucoside, rutinosid, manno gluco pyransyl, aprosylglucoside

R.sup.2 and R.sup.3 represent Hydrogen, Hydroxy, Methoxy or ##STR2##

wherein R.sup.2', R.sup.3', R.sup.4', R.sup.5' and R.sup.6'

are independently or each other Hydrogen, Hydroxy or Methoxy with the proviso, that R.sup.2 or R.sup.3 is represented by the optionally substituted Phenylring.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2001:218473 USPATFULL		
TITLE:	Novel use of flavones		
INVENTOR(S):	Wenzel, Uwe, Freising, Germany, Federal Republic of Daniel, Hannelore, Freising, Germany, Federal Republic of		

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2001046963	A1	20011129	
APPLICATION INFO.:	US 2001-782306	A1	20010214	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-185179P	20000225 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Messrs. Keil & Weinkauf, 1101 Connecticut Ave. N.W., Washington, DC, 20036
NUMBER OF CLAIMS:	12
EXEMPLARY CLAIM:	1
LINE COUNT:	781

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

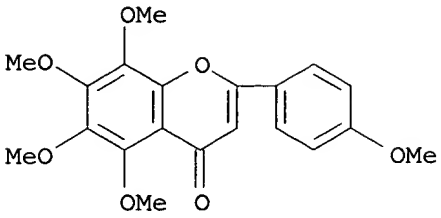
DETD . . . invention may be potentially useful in the treatment of several illness or disease states such as Alzheimer's disease, cardiovascular diseases, **ischemiare** perfusion nijurg, inflammatory bowel diseases, immume disorders including HIV-infection, sepsis, autoimmume diseases, diabetes, inflammatory diseases, dysmennorhea, asthma, premature labor, adhesions. . .

IT **481-53-8**, Tangeretin 486-66-8, Daidzein 487-26-3, Flavanone 491-54-3, Kaempferide 491-67-8, Baicalein 491-70-3, Luteolin 491-80-5, Biochanin 520-26-3, Hesperidin 520-27-4, Diosmin 520-33-2, Hesperetin 525-82-6, Flavone 528-48-3, Fisetin 529-44-2, Myricetin 529-59-9, Genistin 577-85-5, 3-Hydroxyflavone 14259-47-3, Didymin
(flavones for treatment of COX-2 and/or NFκB-mediated diseases)

IT **481-53-8**, Tangeretin
(flavones for treatment of COX-2 and/or NFκB-mediated diseases)

RN 481-53-8 USPATFULL

CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



L5 ANSWER 24 OF 39 HCAPLUS COPYRIGHT 2004 ACS on STN

AB Organ damage, manifested during reperfusion following partial or global **ischemia**, is prevented or treated by administration of a combination of (1) ≥1 inhibitor of the contractility of venular endothelial cells (VEC) (e.g. a benzopyrone, including flavonoids but excluding anticoagulant benzopyrones such as dicumarol) and (2) ≥1 cyclooxygenase 1 inhibitor (preferably a NSAID). The combination is also useful for treatment of microcirculatory disorders, arteriosclerosis, thrombosis, connective tissue diseases, parodontosis, burns, vasculitis, circulatory shock, eclampsia, etc. Thus, confluent layers of VEC were established on porous filters in an apparatus for measurement of pressure-sensitive water transport (Lp). Polymorphonuclear leukocytes (PMN) activated with the inflammatory peptide, N-formyl-Met-Leu-Phe, elevated Lp by the VEC by .apprx.300%; this effect was inhibited by apigenin. Simultaneous exposure of VEC to activated PMN and activated blood platelets caused a 1600% elevation in Lp; this effect was totally suppressed by a combination of apigenin and acetylsalicylic acid which acted synergistically. The increase in Lp is attributed to release by activated platelets of metabolic precursors which are converted, by interaction with activated PMN, to arachidonic acid metabolites which cause rapid contraction of VEC. The effects on VEC in cell culture were confirmed in expts. on isolated postischemic guinea pig hearts. A solution for organ perfusion was prepared by adding a lyophilizate containing trihydroxyethylrutoside 78, acetylsalicylic acid 18, ascorbic acid 18, uric acid 17, inosine 27, aspartic acid 13.3, glutamic acid 14.6, and arginine 17.4 mg to 1000 mL isotonic solution buffered to pH 7.4.

ACCESSION NUMBER: 2000:116884 HCAPLUS
DOCUMENT NUMBER: 132:146639
TITLE: Combination of active substances, especially for the prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes
INVENTOR(S): Nees, Stephan
PATENT ASSIGNEE(S): Vascular Biotech G.m.b.H., Germany
SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000007578	A2	20000217	WO 1999-DE2478	19990806
WO 2000007578	A3	20000511		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,

JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9964628	A1	20000228	AU 1999-64628	19990806
EP 1100539	A2	20010523	EP 1999-952335	19990806
EP 1100539	B1	20021120		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
AT 228011	E	20021215	AT 1999-952335	19990806

PRIORITY APPLN. INFO.:
DE 1998-19835674 A 19980806
DE 1998-19844116 A 19980925
WO 1999-DE2478 W 19990806

TI Combination of active substances, especially for the prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes

AB Organ damage, manifested during reperfusion following partial or global **ischemia**, is prevented or treated by administration of a combination of (1) ≥1 inhibitor of the contractility of venular endothelial cells. . .

ST **ischemia** reperfusion syndrome benzopyrone NSAID; vein endothelium contraction leukocyte platelet; flavonoid cyclooxygenase inhibitor reperfusion syndrome

IT Platelet (blood)
Polymorphonuclear leukocyte
(activated; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)

IT Aglycons
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anthocyanidins; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)

IT Anti-inflammatory agents
Anti-**ischemic** agents
Antiarteriosclerotics
Antioxidants
Blood substitutes
Burn
Shock (circulatory collapse)
Transplant and Transplantation
(combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)

IT Flavones
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)

IT Carboxylic acids, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(di-Ph derivs.; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)

IT Drug delivery systems
(drops; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)

IT Vein
(endothelium, inhibitors of contraction of; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)

IT Flavones
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydroxy isoflavones; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)

IT Flavones
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydroxy; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)

IT Drug delivery systems
(infusions, i.v.; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)

IT Drug delivery systems
(injections, i.v.; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)

IT Reperfusion
(injury; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)

IT Flavones
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(isoflavones; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)

IT Solutions
(isotonic solns.; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)

IT Anti-inflammatory agents
(nonsteroidal; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)

IT Flavonoids
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oxo dihydro; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)

IT Periodontium
(periodontosis; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)

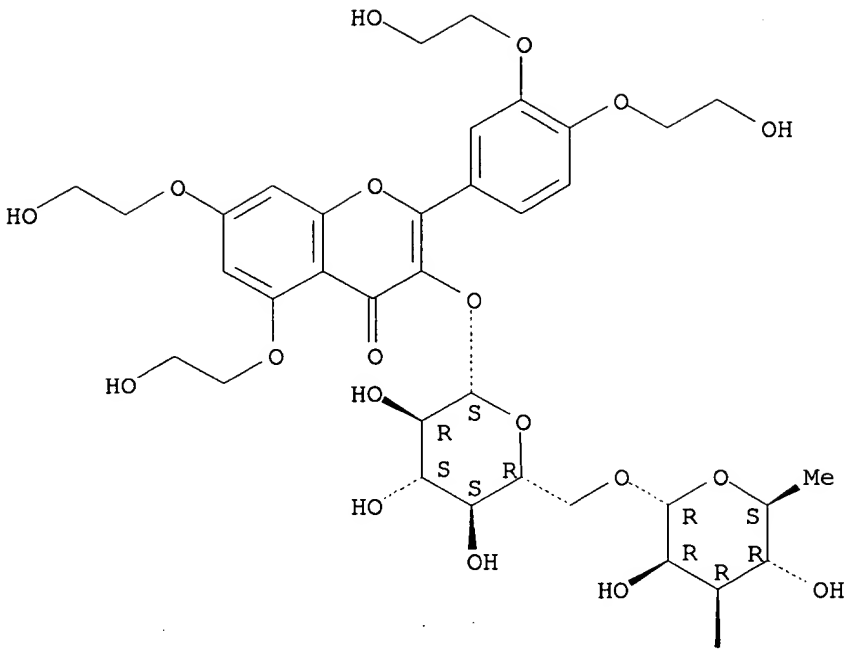
IT Drug delivery systems
(solns., cardioplegic; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)

IT Drug interactions
(synergistic; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)

IT Drug delivery systems
(tablets; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)
IT Vasodilators
(venous; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)
IT 39391-18-9
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(1, inhibitors; combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)
IT 50-78-2, Acetylsalicylic acid 50-81-7, L-Ascorbic acid, biological studies 53-86-1, Indomethacin 56-84-8, L-Aspartic acid, biological studies 56-86-0, L-Glutamic acid, biological studies 58-63-9, Inosine 64-19-7D, Acetic acid, derivs., biological studies 69-72-7D, Salicylic acid, esters 69-93-2, Uric acid, biological studies 74-79-3, L-Arginine, biological studies 79-09-4D, Propionic acid, derivs. 91-40-7D, Fenamic acid, derivs. 91-64-5, Benzo-α-pyrone 94-41-7D, Chalcone, derivs. 117-39-5, Quercetin 154-23-4 480-41-1, Naringenin 491-38-3, Benzo-γ-pyrone 520-36-5, Apigenin **6980-20-7**, Tetrahydroxyethylrutoside **7085-55-4** 15307-86-5, Diclofenac 15687-27-1 26854-07-9 258289-79-1D, derivs.
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)
IT **6980-20-7**, Tetrahydroxyethylrutoside **7085-55-4**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination of active substances for prophylaxis and therapy of **ischemic** organic lesions and reperfusion syndromes)
RN 6980-20-7 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[3,4-bis(2-hydroxyethoxy)phenyl]-3-[[6-O-(6-deoxy-α-L-mannopyranosyl)-β-D-glucopyranosyl]oxy]-5,7-bis(2-hydroxyethoxy)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

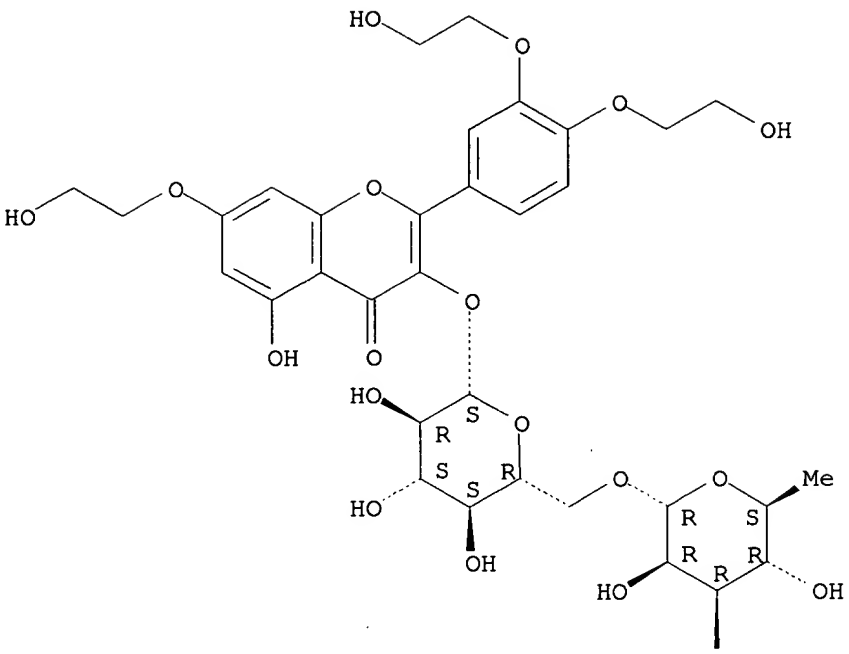


PAGE 2-A

RN 7085-55-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[3,4-bis(2-hydroxyethoxy)phenyl]-3-[[6-O-(6-deoxy-α-L-mannopyranosyl)-β-D-glucopyranosyl]oxy]-5-hydroxy-7-(2-hydroxyethoxy)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

L5 ANSWER 25 OF 39 USPATFULL on STN

AB The invention provides DNA primase assays suitable for identifying DNA primase modulating agents, methods of modulating DNA primase activity and compositions which modulate DNA primase.

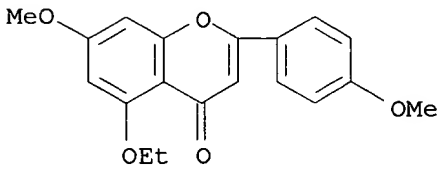
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2000:98184 USPATFULL
TITLE:	Mammalian DNA primase screen and activity modulating agents
INVENTOR(S):	Kozlowski, Michael, Palo Alto, CA, United States Aimi, Junko, San Carlos, CA, United States
PATENT ASSIGNEE(S):	Geron Corporation, Menlo Park, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6096499		20000801
APPLICATION INFO.:	US 1997-828192		19970321 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1996-624343, filed on 22 Mar 1996, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		

DELACROIX

PRIMARY EXAMINER: Marschel, Ardin H.
LEGAL REPRESENTATIVE: Earp, David J.
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 1696
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
SUMM . . . limitation: neoplasia, hyperplasia, benign prostatic hypertrophy, fibrocystic breast disease, reperfusion injury, myocardial infarction, stroke, traumatic brain injury, neurodegenerative diseases, aging, **ischemia**, toxemia, infection, autoimmune diseases, AIDS, hepatitis, and the like.
IT 525-82-6 2425-95-8 4143-74-2 6530-00-3 31913-67-4 33676-24-3 63400-78-2 88893-93-0 **95937-54-5** 175135-31-6 215925-77-2 217316-85-3 218287-25-3 218287-28-6 218287-38-8 219620-04-9 255828-08-1 286860-03-5 286860-04-6 286860-07-9 286860-10-4 286860-12-6 286860-13-7 286860-14-8 286860-15-9
(primase modulator; mammalian DNA primase screens and activity modulating agents)
IT **95937-54-5**
(primase modulator; mammalian DNA primase screens and activity modulating agents)
RN 95937-54-5 USPATFULL
CN 4H-1-Benzopyran-4-one, 5-ethoxy-7-methoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



L5 ANSWER 26 OF 39 USPATFULL on STN
AB The present invention provides thiazolidinediones which are useful as antiproliferative, antiinflammatory and antiinfective agents. These compounds are useful for the treatment of certain endocrine diseases including diabetes, certain malignant and non-malignant proliferative diseases including prostate cancer, breast cancer, psoriasis, and acne, certain cardiovascular disorders including hypertension and occlusive vascular diseases.

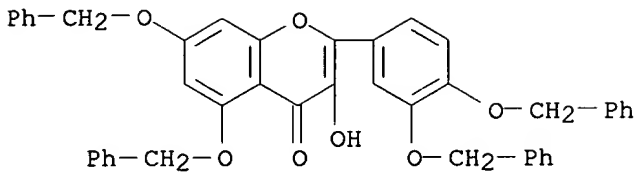
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2000:88214 USPATFULL
TITLE: Flavonoid derivatives
INVENTOR(S): Pershadsingh, Harrihar A., Bakersfield, CA, United States
Avery, Mitchell A., Oxford, MS, United States
PATENT ASSIGNEE(S): University of Mississippi, University, MS, United States (U.S. corporation) by said Mitchell A. Avery

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6087385		20000711

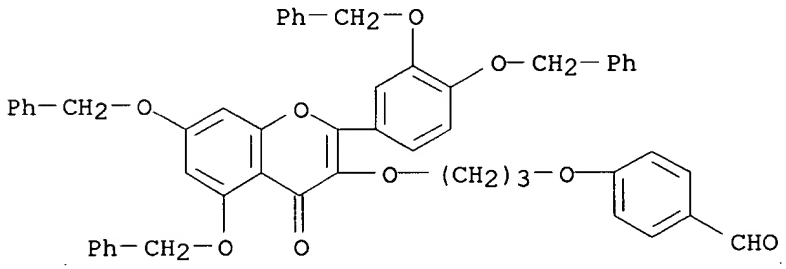
APPLICATION INFO.: US 1999-434366 19991103 (9)
RELATED APPLN. INFO.: Division of Ser. No. US 1998-183798, filed on 30 Oct 1998
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Stockton, Laura L.
LEGAL REPRESENTATIVE: Townsend and Townsend and Crew LLP
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 16 Drawing Figure(s); 16 Drawing Page(s)
LINE COUNT: 2098
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
DETD . . . inversa.
Cardio-
Hypertension, vasculo-occlusive diseases including vascular
atherosclerosis, thrombosis and restenosis after angioplasty; acute coronary syndromes such as unstable angina, myocardial infarction, **ischemic** and non-**ischemic** cardiomyopathies, post-
MI cardiomyopathy and myocardial fibrosis, substance-induced cardiomyopathy.
Endocrine
Insulin resistant states including obesity, diabetes mellitus (types 1 & 2),. . .
DETD . . . Variola, HPV, molluscum contagiosum
Retinitis CMV
Uveitis HPV
Conjunctival warts
HPV
C. epithelial neoplasms
HPV

---

2. Ocularplastic diseases
Benign tumors: Keratocanthoma, molluscum contagiosum, dermoid cysts, neurofibroma,
neurofibromatosis, schwannoma (**neurilemoma**), pleiomorphic adenoma
Malignant tumors: Basal cell carcinoma, squamous cell carcinoma, mucoepidermoid
carcinoma, melanoma, retinoblastoma, embryonal rhabdomyosarcoma, meningioma, adenoid cystic carcinoma, lymphoid tumors. . .
IT 17954-81-3P **116973-12-7P**, 3',4',5,7-Tetra-O-benzylquercitin **258880-76-1P**
(preparation of thiazolidinedionyl-benzopyrans for pharmaceutical use)
IT **116973-12-7P**, 3',4',5,7-Tetra-O-benzylquercitin **258880-76-1P**
(preparation of thiazolidinedionyl-benzopyrans for pharmaceutical use)
RN 116973-12-7 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-[3,4-bis(phenylmethoxy)phenyl]-3-hydroxy-5,7-bis(phenylmethoxy)- (9CI) (CA INDEX NAME)



RN 258880-76-1 USPATFULL
CN Benzaldehyde, 4-[3-[[2-[3,4-bis(phenylmethoxy)phenyl]-4-oxo-5,7-bis(phenylmethoxy)-4H-1-benzopyran-3-yl]oxy]propoxy]- (9CI) (CA INDEX NAME)



L5 ANSWER 27 OF 39 USPATFULL on STN
AB The present invention provides certain novel compounds, compositions, and a method of treating a mammal by blocking its adenosine receptors comprising administering at least one compound of the present invention. Examples of the present inventive compounds include certain flavonoids of formulae (I) and (II), wherein R.sub.1 to R.sub.4 are as defined in the description, and M is --CH(OH)--CH(R.sub.2)-- or --C(OH).dbd.C(R.sub.2)-- and R.sub.1, R.sub.2 are as defined in the description; or dihydropyridines of formula (III), wherein R.sub.2 to R.sub.6 are as defined in the description; or pyridines of formula (IV), wherein R.sub.2 to R.sub.6 are as defined in the description, or triazoloquinazolines of formula (V), wherein R.sub.1 and R.sub.2 are as defined in the description; and their derivatives, or pharmaceutically acceptable salts thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2000:64868 USPATFULL
TITLE: Dihydropyridine-, pyridine-, benzopyran-4-one- and triazoloquinazoline derivative, their preparation and their use as adenosine receptor antagonists
INVENTOR(S): Jacobson, Kenneth A., Silver Spring, MD, United States
Jiang, Ji-Long, North York, Canada
Kim, Yong-Chul, Rockville, MD, United States
Karton, Yishai, Ness-Ziona, Israel
Van Rhee, Albert M., Durham, NC, United States
PATENT ASSIGNEE(S): The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)

NUMBER	KIND	DATE

PATENT INFORMATION:	US 6066642	20000523	
	WO 9727177	19970731	
APPLICATION INFO.:	US 1998-117598	19981207	(9)
	WO 1997-US1252	19970129	
		19981207	PCT 371 date
		19981207	PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-10737P	19960129 (60)
	US 1996-21191P	19960703 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kight, John
ASSISTANT EXAMINER: Covington, Raymond
LEGAL REPRESENTATIVE: Leydig, Voit & Mayer
NUMBER OF CLAIMS: 33
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 17 Drawing Page(s)
LINE COUNT: 3795
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . the above compounds can be used to treat and/or protect against a variety of disorders, including, for example, seizures, transient **ischemic** shock, strokes, focal **ischemia** originating from thrombus or cerebral hemorrhage, global **ischemia** originating from cardiac arrest, trauma, neonatal palsy, hypovolemic shock, and hyperglycemia and associated neuropathies. The above method is applicable, for. . .

DETD . . . functions as an anxiolytic agent. The method is furthermore applicable when said mammal has or is at risk for cerebral **ischemia** and said compound in binding to said A.sub.3 adenosine receptors functions as a cerebroprotectant. The method is also applicable when. . .

DETD . . . (1:4). Control gerbils were injected with saline. The survival of the animals was followed as a function of time after **ischemia** . The animals injected with the antagonist showed high survival rates: 90% after 7 days and 80% after 90 days. The. . .

DETD The number of intact neurons was also counted. After 7 days of **ischemia**, the animals injected with the antagonist had 75% intact neurons, and, after 90 days, the number of intact neurons was. . .

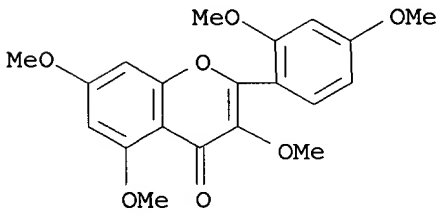
IT 90-19-7P, Rhamnetin 117-39-5P, Quercetin 5489-57-6P, Arborinine **7555-80-8P**, Pentamethylmorin **14813-27-5P**, Hexamethylmyricetin 21829-28-7P 22912-64-7P 24198-97-8P, (±)-Dihydroquercetin 26964-29-4P, 3,5,7-Trimethoxyflavone 39562-02-2P 39562-04-4P 39562-29-3P 39562-70-4P 53632-38-5P 66396-08-5P, 9H-Fluoreno[2,3-d]-1,3-dioxol-9-one 95623-28-2P 96583-65-2P 104615-48-7P 113163-70-5P 139639-68-2P 143996-65-0P 173788-50-6P 176220-89-6P, 3,5,7-Triethoxyflavone 176220-90-9P, 3,7-Diethoxy-5-hydroxyflavone 176220-91-0P, 3,5,7-Tripropyloxyflavone **176220-92-1P** **176220-93-2P** 176220-95-4P 176220-96-5P 176220-97-6P 176220-99-8P 176221-00-4P 176221-01-5P 178534-09-3P 178534-22-0P 178534-23-1P 183721-02-0P 183721-03-1P 183721-04-2P 183721-06-4P 183721-09-7P 183721-11-1P 183721-13-3P 183721-14-4P 183721-15-5P 183721-17-7P 185222-60-0P 185222-62-2P 185222-64-4P 185222-68-8P 185259-16-9P 192052-85-0P 192052-87-2P 192052-89-4P 192052-91-8P 192052-92-9P 192052-94-1P 192052-96-3P 192052-97-4P

192052-98-5P 192052-99-6P 192053-00-2P 192053-01-3P 192053-04-6P
192053-05-7P 192053-10-4P 192053-11-5P 192053-12-6P 192053-16-0P
192053-18-2P 192053-19-3P 192053-21-7P 192053-22-8P 192053-24-0P
192053-25-1P 192053-28-4P 194346-61-7P 194346-64-0P 194346-74-2P
194346-80-0P 194346-92-4P 194346-93-5P 194346-94-6P 194346-95-7P
194347-01-8P 194347-02-9P 194347-15-4P
(preparation of dihydropyridines, pyridines, benzopyranones, and triazoloquinazolines for use as adenosine receptor antagonists)

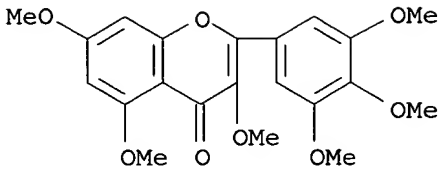
IT 446-72-0, Genistein 487-26-3, Flavanone 491-78-1 517-28-2, Hema-toxylin 520-36-5, Apigenin 525-82-6, Flavone 604-59-1, α-Naphthoflavone 1447-88-7, Hispidulin 2957-21-3, Sakuranetin **5128-44-9** 5938-16-9 6051-87-2, β-Naphthoflavone 6601-62-3, Cirsimaritin 6665-86-7 13178-98-8 **16692-52-7,** Tetramethylkaempferol 17348-76-4 21829-25-4, Nifedipine 33500-23-1 33513-36-9 55985-32-5 66085-59-4 67035-22-7 102993-22-6 123180-08-5 173788-52-8, 4',5,6,7-Tetramethylscutallarein 173788-53-9, Acetylhaemanthamine methoidide 176220-94-3 183721-12-2 183721-16-6 185222-66-6 185222-67-7 185222-70-2 185222-74-6 185222-76-8 185222-77-9 185222-79-1 185222-80-4 185222-81-5 185222-82-6 185222-83-7 185222-84-8 185222-86-0 185222-87-1 185222-88-2 185222-89-3 185222-90-6 185223-17-0 192052-93-0 192052-95-2 192053-02-4 192053-03-5 192053-09-1 192053-17-1 192053-20-6 192053-23-9 194346-55-9 194346-77-5 194346-96-8 194346-97-9 194346-98-0 194346-99-1 194347-00-7 194347-03-0 194347-04-1 194347-05-2 194347-06-3 194347-07-4 194347-10-9 194347-11-0 194347-12-1 194347-13-2 194347-14-3 194347-16-5 194347-17-6 194347-18-7
(preparation of dihydropyridines, pyridines, benzopyranones, and triazoloquinazolines for use as adenosine receptor antagonists)

IT **7555-80-8P,** Pentamethylmorin **14813-27-5P,** Hexamethylmyricetin **176220-92-1P 176220-93-2P**
(preparation of dihydropyridines, pyridines, benzopyranones, and triazoloquinazolines for use as adenosine receptor antagonists)

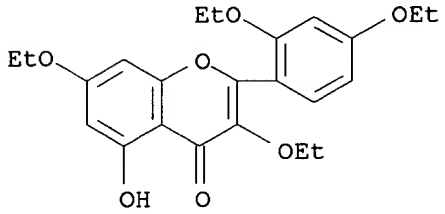
RN 7555-80-8 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(2,4-dimethoxyphenyl)-3,5,7-trimethoxy- (9CI) (CA INDEX NAME)



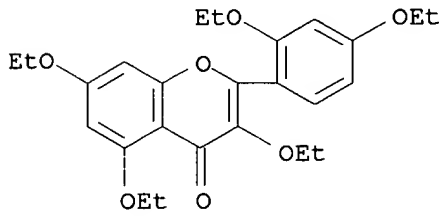
RN 14813-27-5 USPATFULL
CN 4H-1-Benzopyran-4-one, 3,5,7-trimethoxy-2-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)



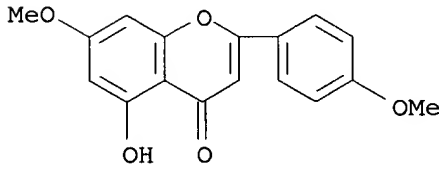
RN 176220-92-1 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(2,4-diethoxyphenyl)-3,7-diethoxy-5-hydroxy- (9CI) (CA INDEX NAME)



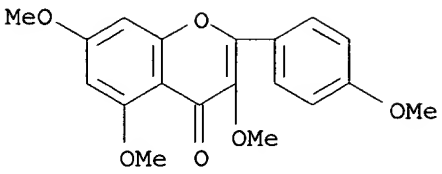
RN 176220-93-2 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(2,4-diethoxyphenyl)-3,5,7-triethoxy- (9CI) (CA INDEX NAME)



IT **5128-44-9 16692-52-7,** Tetramethylkaempferol
(preparation of dihydropyridines, pyridines, benzopyranones, and triazoloquinazolines for use as adenosine receptor antagonists)
RN 5128-44-9 USPATFULL
CN 4H-1-Benzopyran-4-one, 5-hydroxy-7-methoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 16692-52-7 USPATFULL
CN 4H-1-Benzopyran-4-one, 3,5,7-trimethoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



L5 ANSWER 28 OF 39 USPATFULL on STN

AB The present invention provides thiazolidinediones which are useful as antiproliferative, antiinflammatory and antiinfective agents. These compounds are useful for the treatment of certain endocrine diseases including diabetes, certain malignant and non-malignant proliferative diseases including prostate cancer, breast cancer, psoriasis, and acne, certain cardiovascular disorders including hypertension and occlusive vascular diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2000:21582 USPATFULL
TITLE:	Flavonoid derivatives
INVENTOR(S):	Pershadsingh, Harrihar A., Bakersfield, CA, United States Avery, Mitchell A., Oxford, MS, United States
PATENT ASSIGNEE(S):	The University of Mississippi, University, MS, United States (U.S. corporation) by said Mitchell A. Avery

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6028088		20000222	
APPLICATION INFO.:	US 1998-183798		19981030	(9)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Stockton, Laura L.
LEGAL REPRESENTATIVE:	Townsend and Townsend and Crew LLP
NUMBER OF CLAIMS:	31
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	16 Drawing Figure(s); 16 Drawing Page(s)
LINE COUNT:	2121

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . Cardiovascular Hypertension, vasculo-occlusive diseases including atherosclerosis, thrombosis and restenosis after angioplasty; acute coronary syndromes such as unstable angina, myocardial infarction, **ischemic** and non-ischeinic cardiomyopathies, post-MI cardiomyopathy and myocardial fibrosis, substance-induced cardiomyopathy.

Endocrine Insulin resistant states including obesity, diabetes mellitus (types 1

. . .

DETD . . . Uveitis HPV

Conjunctival warts HPV

C. epithelial neoplasms HPV

2. Ocularplastic diseases

Benign tumors: Keratocanthoma, molluscum contagiosum, dermoid cysts, neurofibroma,

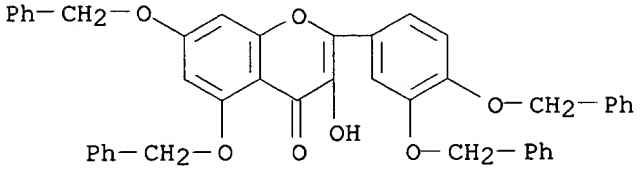
neurofibromatosis, schwannoma (**neurilemoma**), pleiomorphic adenoma
Malignant tumors: Basal cell carcinoma, squamous cell carcinoma, mucoepidermoid
carcinoma, melanorna, retinoblastoma, embryonal rhabdomyosarcoma, meningioma, adenoid cystic carcinoma, lymphoid. . .

IT 17954-81-3P **116973-12-7P**, 3',4',5,7-Tetra-O-benzylquercitin **258880-76-1P**
(preparation of thiazolidinedionyl-benzopyrans for pharmaceutical use)

IT **116973-12-7P**, 3',4',5,7-Tetra-O-benzylquercitin **258880-76-1P**
(preparation of thiazolidinedionyl-benzopyrans for pharmaceutical use)

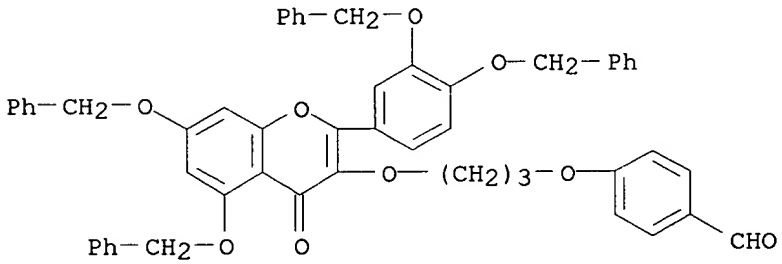
RN 116973-12-7 USPATFULL

CN 4H-1-Benzopyran-4-one, 2-[3,4-bis(phenylmethoxy)phenyl]-3-hydroxy-5,7-bis(phenylmethoxy)- (9CI) (CA INDEX NAME)



RN 258880-76-1 USPATFULL

CN Benzaldehyde, 4-[3-[[2-[3,4-bis(phenylmethoxy)phenyl]-4-oxo-5,7-bis(phenylmethoxy)-4H-1-benzopyran-3-yl]oxy]propoxy]- (9CI) (CA INDEX NAME)



L5 ANSWER 29 OF 39 USPATFULL on STN

AB The present invention relates to novel flavone/flavanone compounds or their pharmaceutically acceptable salts and process for preparation thereof for protecting gastrointestinal tracts against gastritis, ulcers and inflammatory bowel disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2000:18472 USPATFULL

TITLE: Gastroprotective flavone/flavanone compounds with therapeutic effect on inflammatory bowel disease

INVENTOR(S): Yoo, Moohi, Seoul, Korea, Republic of
Son, Mi Won, Kyoungki-do, Korea, Republic of
Kim, Ik Yon, Kyoungki-do, Korea, Republic of
Kim, Won Bae, Seoul, Korea, Republic of
Kim, Soon Hoe, Kyoungki-do, Korea, Republic of

Lee, Sang Deuk, Seoul, Korea, Republic of
Lim, Geun Jho, Seoul, Korea, Republic of
Lim, Joong In, Seoul, Korea, Republic of
Ahn, Byoung Ok, Kyunggi-do, Korea, Republic of
Baik, Nam Gi, Kyoungki-do, Korea, Republic of
Kim, Dong Sung, Kyoungki-do, Korea, Republic of
Oh, Tae Young, Kyunggi-do, Korea, Republic of
Ryu, Byung Kwon, Seoul, Korea, Republic of
Yang, Jae Sung, Seoul, Korea, Republic of
Shin, Hee Chan, Seoul, Korea, Republic of
PATENT ASSIGNEE(S): Dong a Pharmaceutical Co., Ltd., Korea, Republic of
(non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6025387		20000215	
	WO 9804541		19980205	
APPLICATION INFO.:	US 1999-214889		19990114	(9)
	WO 1997-KR144		19970725	
			19990114	PCT 371 date
			19990114	PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	KR 1996-30494	19960725

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Richter, Johann
ASSISTANT EXAMINER: Solola, Taofiq A.
LEGAL REPRESENTATIVE: Bachman & LaPointe, P.C.
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
LINE COUNT: 1562
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . 1982, 47: 412). And it was demonstrated that free radical scavengers have effects on protecting mucosa from damages induced by **ischemic** reperfusion (Peery, M. A., et al., Gastroentero logy, 1986, 90: 362), and then two enzymic antioxidants SOD and catalase could. . .

IT 480-11-5P, 5,7-Dihydroxy-6-methoxyflavone 520-12-7P, 5,7-Dihydroxy-4',6-dimethoxyflavone 2035-05-4P, 7-Hydroxy-5,6-dimethoxyflavone 4712-12-3P, 5,7-Dihydroxy-3',4'-dimethoxyflavone 10544-05-5P, 7-Hydroxy-3',4',5-trimethoxyflavone 22368-21-4P, 5,7-Dihydroxy-3',4',6-trimethoxyflavone 25892-98-2P, 3',7-Dihydroxy-4',5,6-trimethoxyflavone 40983-99-1P, 7-Hydroxy-3',4',5,6-tetramethoxyflavone 77733-15-4P, 7-Hydroxy-4',5,6-trimethoxyflavone 88153-47-3P, 3',4',7-Trihydroxy-5,6-dimethoxyflavone 94303-31-8P, 3',4',5,6-Tetramethoxyflavone 118793-57-0P, 7-Hydroxy-3',4',6-trimethoxyflavone 136198-18-0P, 3',4',5-Trimethoxyflavone 203190-88-9P, 7-Hydroxy-3',4',5-trimethoxy-6-propoxyflavone 203190-89-0P, 5,7-Dihydroxy-3',4'-dimethoxy-6-propoxyflavone 203190-90-3P, 7-Hydroxy-3',4',5-trimethoxy-6-(pentyloxy)flavone 203190-92-5P, 6-Ethoxy-7-Hydroxy-3',4',5-trimethoxyflavone 203190-93-6P, 6-Ethoxy-5,7-dihydroxy-3',4'-dimethoxyflavone 203190-94-7P, 6-Butoxy-7-Hydroxy-3',4',5-trimethoxyflavone 203190-95-8P, 6-Butoxy-5,7-dihydroxy-3',4'-dimethoxyflavone 203190-96-9P, 7-Hydroxy-6-(pentyloxy)flavone

203190-97-0P, 7-Hydroxy-3',4'-dimethoxy-6-(pentyloxy)flavone
203190-98-1P, 5,7-Dihydroxy-6-methoxy-4'-methylthioflavone 203190-99-2P
203191-03-1P, 7-(Carboxymethyloxy)-3',4',5,6-tetramethoxyflavone
203191-10-0P, 7-(Carboxymethyloxy)-3',4',5-trimethoxyflavone
(preparation of gastro-protective flavones and flavanones for treatment of inflammatory bowel disease)

IT 520-11-6P, 3',4',5,7-Tetrahydroxy-6-methoxyflavone 520-34-3P, 3',5,7-Trihydroxy-4'-methoxyflavone **21763-80-4P**, 5-Hydroxy-3',4',6,7-tetramethoxyflavone 22934-99-2P, 3',5,7-Trihydroxy-4',6-dimethoxyflavone 56847-13-3P, 5,7-Dihydroxy-3',4',6-trimethoxyflavanone 93876-58-5P, 5-Hydroxy-3',4',6-trimethoxyflavone 109469-87-6P, 7-Hydroxy-3',4',5-trimethoxyflavanone 203190-91-4P, 5,7-Dihydroxy-3',4'-dimethoxy-6-(pentyloxy)flavone **203191-01-9P**, 7-(Methoxycarbonylmethyloxy)-3',4',5-trimethoxyflavone **203191-05-3P**, 7-(Carboxymethyloxy)-5-hydroxy-3',4',6-trimethoxyflavone 203191-07-5P, 7-(Carboxymethyloxy)-3',4',6-trimethoxyflavone 203191-09-7P, 7-(Carboxymethyloxy)-5-hydroxy-3',4',6-trimethoxyflavanone 203191-11-1P, 7-(Carboxymethyloxy)-5-hydroxy-6-methoxy-4'-methylthioflavone 203191-12-2P, 7-(Carboxymethyloxy)-6-pentyloxyflavanone 203191-15-5P, 7-(Carboxymethyloxy)-6-pentyloxyflavone 203191-17-7P, 7-(Carboxymethyloxy)-3',4'-dimethoxy-6-pentyloxyflavone 203191-18-8P, 7-(Carboxymethyloxy)-5-hydroxy-6-methoxyflavone **203191-20-2P**, 7-(Carboxymethyloxy)-5-hydroxy-6-ethoxy-3',4'-dimethoxyflavone **203191-22-4P**, 7-(Carboxymethyloxy)-5-hydroxy-4',6-dimethoxyflavone **203191-24-6P**, 7-(Carboxymethyloxy)-5-hydroxy-6-butoxy-3',4'-dimethoxyflavone **203191-26-8P**, 7-(Carboxymethyloxy)-5-hydroxy-6-propoxy-3',4'-dimethoxyflavone **203191-28-0P**, 7-(Carboxymethyloxy)-5-hydroxy-3',4'-dimethoxyflavone **203191-31-5P**, 5-Benzyloxy-7-(Carboxymethyloxy)-3',4'-dimethoxyflavone **203191-32-6P**, 5-Butoxy-7-(Carboxymethyloxy)-3',4'-dimethoxyflavone 203191-33-7P **203191-34-8P** **203191-35-9P** **203191-36-0P**, 7-(2-Hydroxyethoxy)-3',4',5-trimethoxyflavone **203191-37-1P**, 7-(2-Hydroxyethoxy)-3',4',5,6-tetramethoxyflavone
(preparation of gastro-protective flavones and flavanones for treatment of inflammatory bowel disease)

IT 96-32-2, Methyl bromoacetate 120-14-9, 3,4-Dimethoxybenzaldehyde 703-23-1 **2306-27-6**, 3',4',5,6,7-Pentamethoxyflavone 5292-43-3, tert-Butyl bromoacetate 29682-12-0 39548-89-5 **203191-70-2**
(preparation of gastro-protective flavones and flavanones for treatment of inflammatory bowel disease)

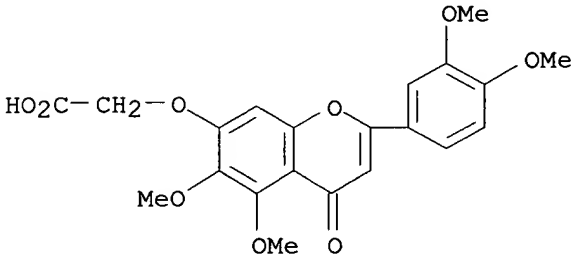
IT 22248-13-1P 25892-94-8P 25892-95-9P **25892-97-1P** **25893-02-1P** 33539-20-7P 34176-17-5P 34176-18-6P 52378-70-8P **52378-71-9P**, 7-Benzyloxy-3',4',5,6-tetramethoxyflavone 54299-53-5P **54544-08-0P** 59171-31-2P 93878-59-2P 118793-55-8P 118793-56-9P 203191-38-2P 203191-39-3P **203191-40-6P** 203191-41-7P 203191-42-8P **203191-43-9P** 203191-44-0P 203191-45-1P **203191-46-2P** 203191-47-3P 203191-48-4P **203191-49-5P** 203191-50-8P 203191-51-9P 203191-52-0P 203191-53-1P 203191-54-2P 203191-55-3P 203191-56-4P 203191-57-5P 203191-58-6P 203191-59-7P 203191-60-0P 203191-61-1P **203191-62-2P** 203191-63-3P **203191-64-4P** 203191-65-5P **203191-66-6P** **203191-67-7P** 203191-68-8P 203191-69-9P **203191-71-3P**
(preparation of gastro-protective flavones and flavanones for treatment of

inflammatory bowel disease)

IT **203191-03-1P**, 7-(Carboxymethyloxy)-3',4',5,6-tetramethoxyflavone
203191-10-0P, 7-(Carboxymethyloxy)-3',4',5-trimethoxyflavone
(preparation of gastro-protective flavones and flavanones for treatment of inflammatory bowel disease)

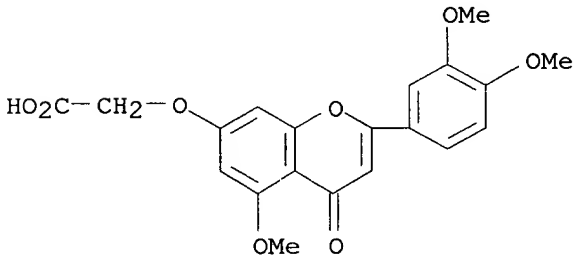
RN 203191-03-1 USPATFULL

CN Acetic acid, [[2-(3,4-dimethoxyphenyl)-5,6-dimethoxy-4-oxo-4H-1-benzopyran-7-yl]oxy]- (9CI) (CA INDEX NAME)



RN 203191-10-0 USPATFULL

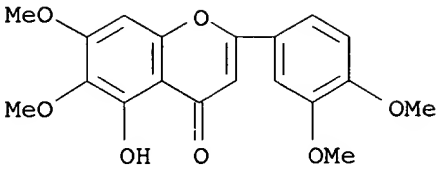
CN Acetic acid, [[2-(3,4-dimethoxyphenyl)-5-methoxy-4-oxo-4H-1-benzopyran-7-yl]oxy]- (9CI) (CA INDEX NAME)



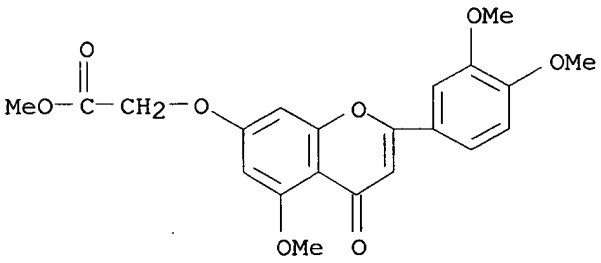
IT **21763-80-4P**, 5-Hydroxy-3',4',6,7-tetramethoxyflavone
203191-01-9P, 7-(Methoxycarbonylmethyloxy)-3',4',5-trimethoxyflavone **203191-05-3P**, 7-(Carboxymethyloxy)-5-hydroxy-3',4',6-trimethoxyflavone **203191-20-2P**, 7-(Carboxymethyloxy)-5-hydroxy-6-ethoxy-3',4'-dimethoxyflavone **203191-22-4P**, 7-(Carboxymethyloxy)-5-hydroxy-4',6-dimethoxyflavone **203191-24-6P**, 7-(Carboxymethyloxy)-5-hydroxy-6-butoxy-3',4'-dimethoxyflavone **203191-26-8P**, 7-(Carboxymethyloxy)-5-hydroxy-6-propoxy-3',4'-dimethoxyflavone **203191-28-0P**, 7-(Carboxymethyloxy)-5-hydroxy-3',4'-dimethoxyflavone **203191-31-5P**, 5-Benzyloxy-7-(Carboxymethyloxy)-3',4'-dimethoxyflavone **203191-32-6P**, 5-Butoxy-7-(Carboxymethyloxy)-3',4'-dimethoxyflavone **203191-34-8P** **203191-35-9P** **203191-36-0P**, 7-(2-Hydroxyethoxy)-3',4',5-trimethoxyflavone **203191-37-1P**, 7-(2-Hydroxyethoxy)-3',4',5,6-tetramethoxyflavone
(preparation of gastro-protective flavones and flavanones for treatment of inflammatory bowel disease)

RN 21763-80-4 USPATFULL

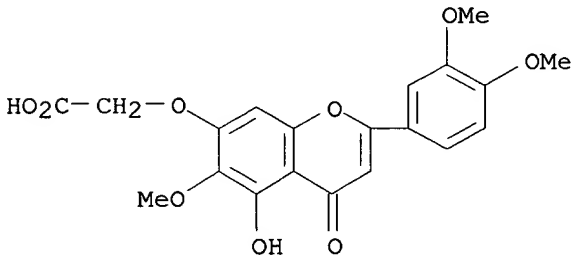
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5-hydroxy-6,7-dimethoxy- (9CI) (CA INDEX NAME)



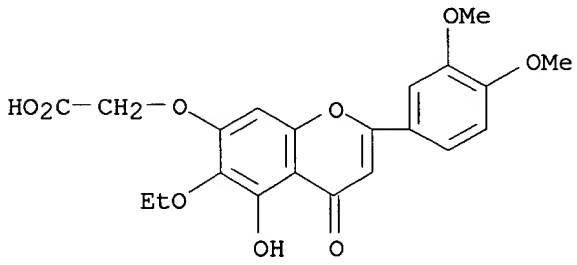
RN 203191-01-9 USPATFULL
CN Acetic acid, [[2-(3,4-dimethoxyphenyl)-5-methoxy-4-oxo-4H-1-benzopyran-7-yl]oxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 203191-05-3 USPATFULL
CN Acetic acid, [[2-(3,4-dimethoxyphenyl)-5-hydroxy-6-methoxy-4-oxo-4H-1-benzopyran-7-yl]oxy]- (9CI) (CA INDEX NAME)



RN 203191-20-2 USPATFULL
CN Acetic acid, [[2-(3,4-dimethoxyphenyl)-6-ethoxy-5-hydroxy-4-oxo-4H-1-benzopyran-7-yl]oxy]- (9CI) (CA INDEX NAME)



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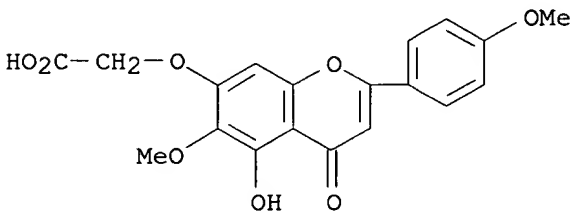
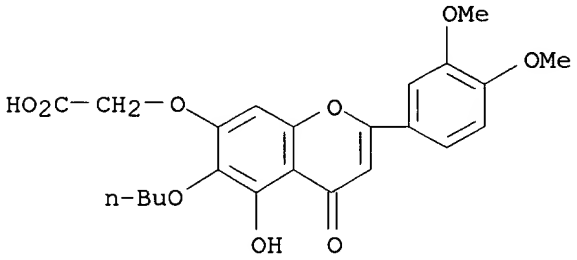
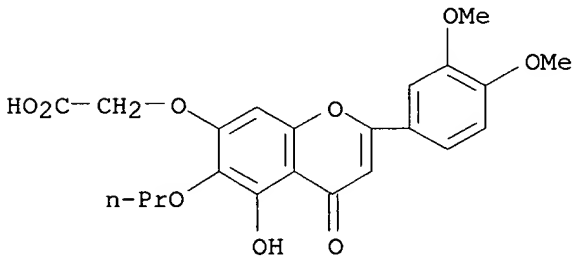
RN 203191-22-4 USPATFULL
CN Acetic acid, [[5-hydroxy-6-methoxy-2-(4-methoxyphenyl)-4-oxo-4H-1-benzopyran-7-yl]oxy]- (9CI) (CA INDEX NAME)



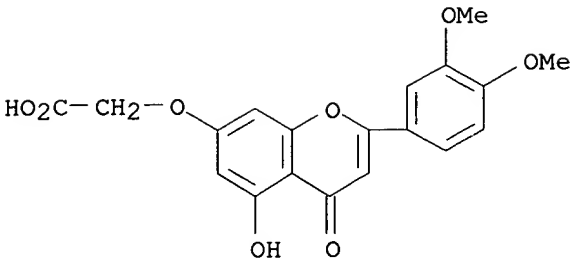
RN 203191-24-6 USPATFULL
CN Acetic acid, [[6-butoxy-2-(3,4-dimethoxyphenyl)-5-hydroxy-4-oxo-4H-1-benzopyran-7-yl]oxy]- (9CI) (CA INDEX NAME)



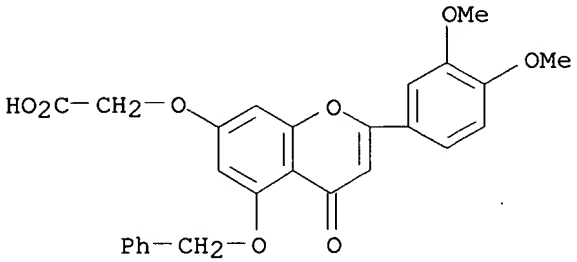
RN 203191-26-8 USPATFULL
CN Acetic acid, [[2-(3,4-dimethoxyphenyl)-5-hydroxy-4-oxo-6-propoxy-4H-1-benzopyran-7-yl]oxy]- (9CI) (CA INDEX NAME)



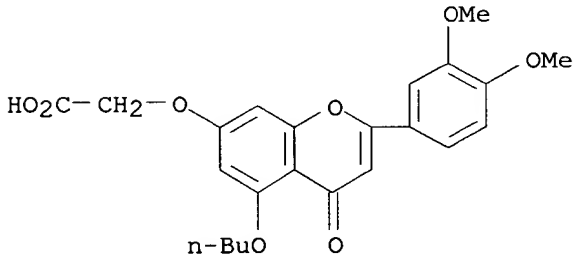
RN 203191-28-0 USPATFULL
CN Acetic acid, [[2-(3,4-dimethoxyphenyl)-5-hydroxy-4-oxo-4H-1-benzopyran-7-yl]oxy]- (9CI) (CA INDEX NAME)



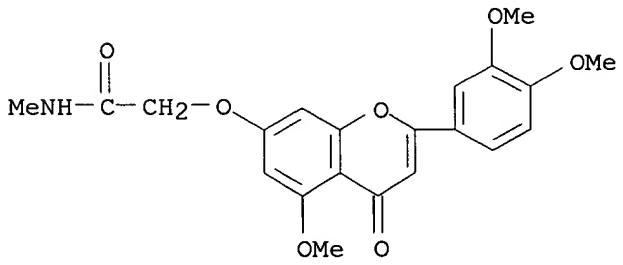
RN 203191-31-5 USPATFULL
CN Acetic acid, [[2-(3,4-dimethoxyphenyl)-4-oxo-5-(phenylmethoxy)-4H-1-benzopyran-7-yl]oxy]- (9CI) (CA INDEX NAME)



RN 203191-32-6 USPATFULL
CN Acetic acid, [[5-butoxy-2-(3,4-dimethoxyphenyl)-4-oxo-4H-1-benzopyran-7-yl]oxy]- (9CI) (CA INDEX NAME)



RN 203191-34-8 USPATFULL
CN Acetamide, 2-[[2-(3,4-dimethoxyphenyl)-5-methoxy-4-oxo-4H-1-benzopyran-7-yl]oxy]-N-methyl- (9CI) (CA INDEX NAME)



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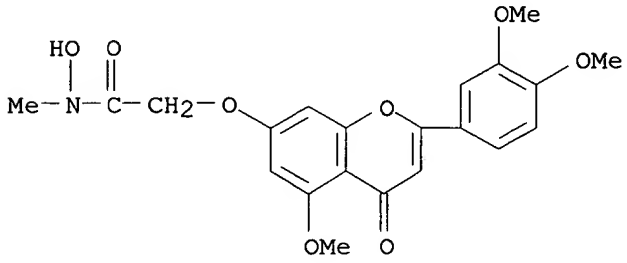
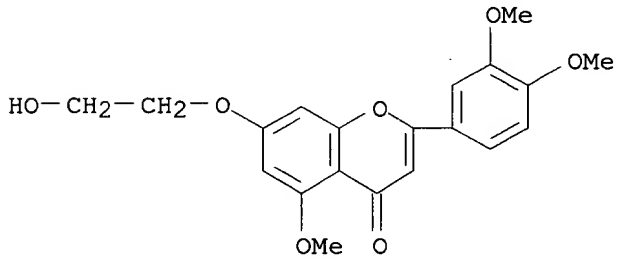
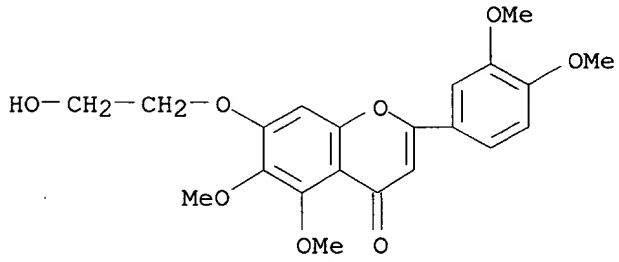
RN 203191-35-9 USPATFULL
CN Acetamide, 2-[[2-(3,4-dimethoxyphenyl)-5-methoxy-4-oxo-4H-1-benzopyran-7-yl]oxy]-N-hydroxy-N-methyl- (9CI) (CA INDEX NAME)



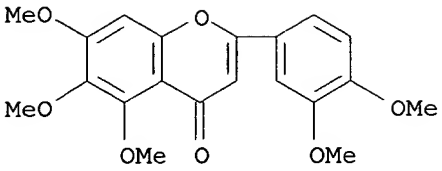
RN 203191-36-0 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-7-(2-hydroxyethoxy)-5-methoxy- (9CI) (CA INDEX NAME)



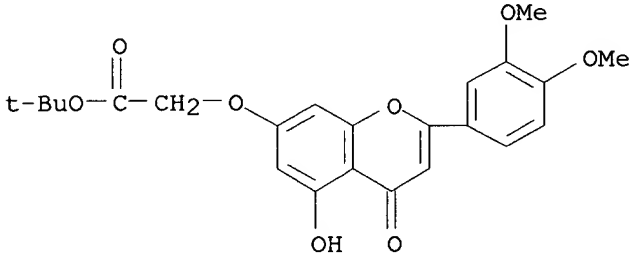
RN 203191-37-1 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-7-(2-hydroxyethoxy)-5,6-dimethoxy- (9CI) (CA INDEX NAME)



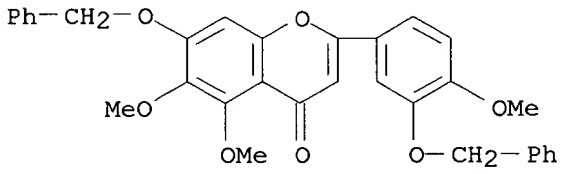
IT **2306-27-6**, 3',4',5,6,7-Pentamethoxyflavone **203191-70-2**
(preparation of gastro-protective flavones and flavanones for treatment of inflammatory bowel disease)
RN 2306-27-6 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7-trimethoxy- (9CI) (CA INDEX NAME)



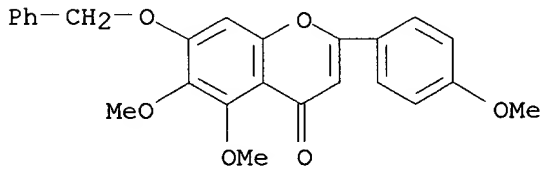
RN 203191-70-2 USPATFULL
CN Acetic acid, [[2-(3,4-dimethoxyphenyl)-5-hydroxy-4-oxo-4H-1-benzopyran-7-yl]oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



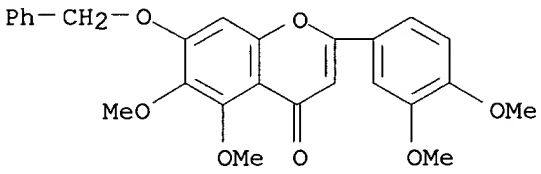
IT **25892-97-1P 25893-02-1P 52378-71-9P,**
7-Benzyloxy-3',4',5,6-tetramethoxyflavone **54544-08-0P**
203191-40-6P 203191-43-9P 203191-46-2P
203191-49-5P 203191-62-2P 203191-64-4P
203191-66-6P 203191-67-7P 203191-71-3P
(preparation of gastro-protective flavones and flavanones for treatment of inflammatory bowel disease)
RN 25892-97-1 USPATFULL
CN 4H-1-Benzopyran-4-one, 5,6-dimethoxy-2-[4-methoxy-3-(phenylmethoxy)phenyl]-7-(phenylmethoxy)- (9CI) (CA INDEX NAME)



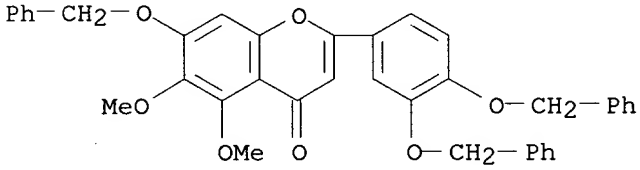
RN 25893-02-1 USPATFULL
CN 4H-1-Benzopyran-4-one, 5,6-dimethoxy-2-(4-methoxyphenyl)-7-(phenylmethoxy)- (9CI) (CA INDEX NAME)



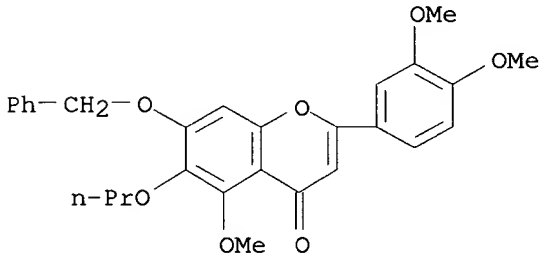
RN 52378-71-9 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6-dimethoxy-7-(phenylmethoxy)- (9CI) (CA INDEX NAME)



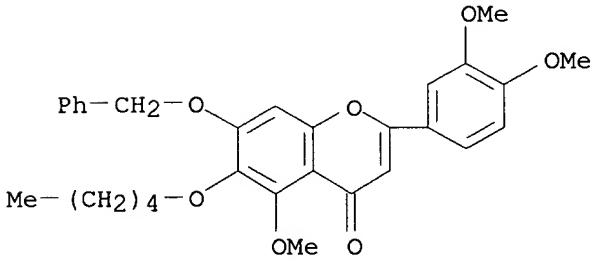
RN 54544-08-0 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-[3,4-bis(phenylmethoxy)phenyl]-5,6-dimethoxy-7-(phenylmethoxy)- (9CI) (CA INDEX NAME)



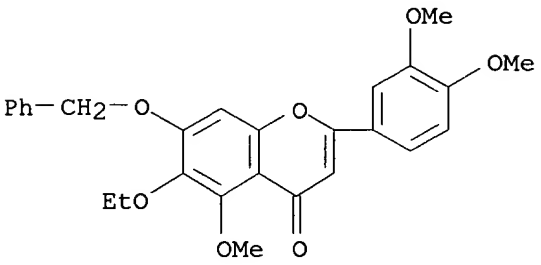
RN 203191-40-6 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5-methoxy-7-(phenylmethoxy)-6-propoxy- (9CI) (CA INDEX NAME)



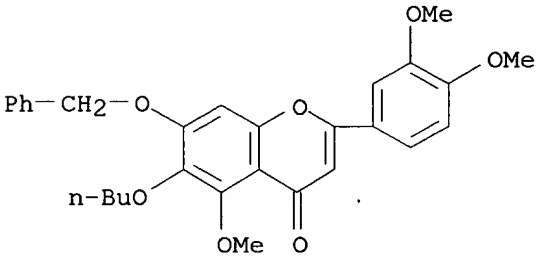
RN 203191-43-9 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5-methoxy-6-(pentyloxy)-7-(phenylmethoxy)- (9CI) (CA INDEX NAME)



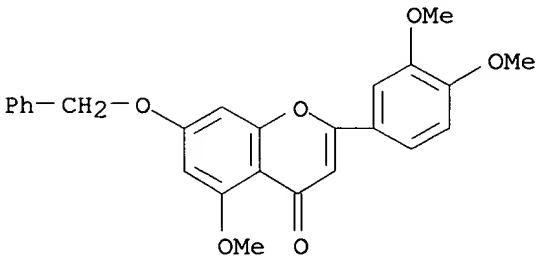
RN 203191-46-2 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-6-ethoxy-5-methoxy-7-(phenylmethoxy)- (9CI) (CA INDEX NAME)



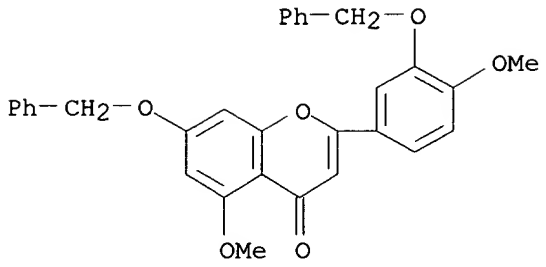
RN 203191-49-5 USPATFULL
CN 4H-1-Benzopyran-4-one, 6-butoxy-2-(3,4-dimethoxyphenyl)-5-methoxy-7-(phenylmethoxy)- (9CI) (CA INDEX NAME)



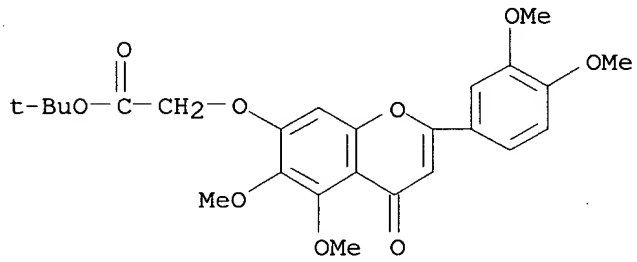
RN 203191-62-2 USPATFULL
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5-methoxy-7-(phenylmethoxy)- (9CI) (CA INDEX NAME)



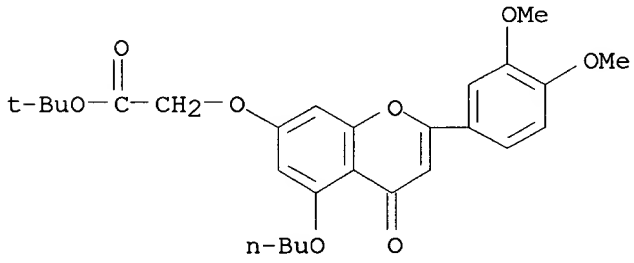
RN 203191-64-4 USPATFULL
CN 4H-1-Benzopyran-4-one, 5-methoxy-2-[4-methoxy-3-(phenylmethoxy)phenyl]-7-(phenylmethoxy)- (9CI) (CA INDEX NAME)



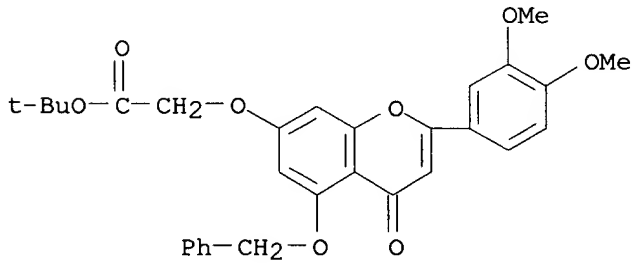
RN 203191-66-6 USPATFULL
CN Acetic acid, [[2-(3,4-dimethoxyphenyl)-5,6-dimethoxy-4-oxo-4H-1-benzopyran-7-yl]oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 203191-67-7 USPATFULL
CN Acetic acid, [[5-butoxy-2-(3,4-dimethoxyphenyl)-4-oxo-4H-1-benzopyran-7-yl]oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 203191-71-3 USPATFULL
CN Acetic acid, [[2-(3,4-dimethoxyphenyl)-4-oxo-5-(phenylmethoxy)-4H-1-benzopyran-7-yl]oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



DELACROIX

L5 ANSWER 30 OF 39 HCAPLUS COPYRIGHT 2004 ACS on STN

AB Various dietary flavonoids were evaluated in vitro for their inhibitory effect on xanthine oxidase, which has been implicated in oxidative injury to tissue by **ischemia**-reperfusion. Xanthine oxidase activity was determined by directly measuring uric acid formation by HPLC. The structure-activity relationship revealed that the planar flavones and flavonols with a 7-hydroxyl group such as chrysin, luteolin, kaempferol, quercetin, myricetin, and isorhamnetin inhibited xanthine oxidase activity at low concns. (IC50 values from 0.40 to 5.02 μM) in a mixed-type mode, while the nonplanar flavonoids, isoflavones and anthocyanidins were less inhibitory. These results suggest that certain flavonoids might suppress in vivo the formation of active oxygen species and urate by xanthine oxidase.

ACCESSION NUMBER: 1999:725048 HCAPLUS
DOCUMENT NUMBER: 132:44494
TITLE: Inhibition of xanthine oxidase by flavonoids
AUTHOR(S): Nagao, Akihiko; Seki, Michiko; Kobayashi, Hidetaka
CORPORATE SOURCE: National Food Research Institute, Ministry of Agriculture, Forestry and Fisheries, Tsukuba, 305-8642, Japan
SOURCE: Bioscience, Biotechnology, and Biochemistry (1999), 63(10), 1787-1790
CODEN: BBBIEJ; ISSN: 0916-8451
PUBLISHER: Japan Society for Bioscience, Biotechnology, and Agrochemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

AB . . . evaluated in vitro for their inhibitory effect on xanthine oxidase, which has been implicated in oxidative injury to tissue by **ischemia**-reperfusion. Xanthine oxidase activity was determined by directly measuring uric acid formation by HPLC. The structure-activity relationship revealed that the planar. . .

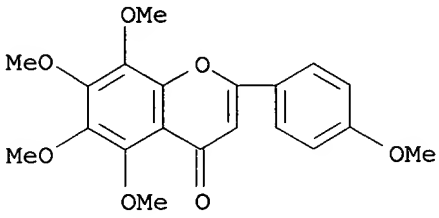
IT Antioxidants
Ischemia
Structure-activity relationship
(structure-related inhibition of xanthine oxidase by flavonoids)

IT 60-82-2, Phloretin 90-19-7, Rhamnetin 117-39-5, Quercetin 134-01-0, Peonidin 134-04-3, Pelargonidin 153-18-4, Rutin 154-23-4, + Catechin 446-72-0, Genistein 480-18-2, Taxifolin 480-19-3, Isorhamnetin 480-40-0, Chrysin **481-53-8**, Tangeretin 486-66-8, Daidzein 487-26-3, Flavanone 490-46-0, -Epicatechin 491-70-3, Luteolin 520-18-3, KAempferol 520-33-2, Hesperitin 525-82-6, Flavone 528-53-0, Delphinidin 528-58-5, Cyanidin 529-44-2, Myricetin 574-12-9, Isoflavone 577-85-5, Flavonol 863-03-6, -Epicatechin gallate 970-74-1, -Epigallocatechin 989-51-5, (-)-Epigallocatechin gallate 1151-98-0, Apigenidin 1481-83-0, 3-Flavanol 1621-55-2 14051-53-7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(structure-related inhibition of xanthine oxidase by flavonoids)

IT **481-53-8**, Tangeretin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(structure-related inhibition of xanthine oxidase by flavonoids)

RN 481-53-8 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 31 OF 39 HCAPLUS COPYRIGHT 2004 ACS on STN

AB We characterized the changes in nitric oxide (NO) levels in the brain during global forebrain **ischemia** and reperfusion and tested the ability of the natural flavonoid, quercetin, and a synthetic flavonoid, FB277, to increase the amount of available NO by elimination of the superoxide radicals produced during reperfusion. In Sprague-Dawley rats, we used a four-vessel occlusion model of forebrain **ischemia** (15 min) and reperfusion (30 min). Brain NO was measured on samples of cerebral cortex and cerebellum ex vivo by ESR (EPR) spectroscopy. The spin trap used was diethyldithiocarbamate sodium salt (DETC) associated with ferrous citrate. The complex Fe(DETC)2NO was detected at 77 K as a triplet signal at g = 2.035. Groups of animals were treated with quercetin or FB277 (3-morpholinomethyl-3',4',5,7-tetramethoxyflavone) or polyethylene glycol-conjugated superoxide dismutase (PEG-SOD). In control (intact anesthetized animals), the signal was about 3 times greater in the cortex than in the cerebellum. During **ischemia**, the signal rose to 110% in cortex (NS) and 283% in cerebellum ($P < 0.05$). In reperfusion, it fell again to 91% of control in cerebellum (NS) and 35% in cortex ($P < 0.05$). Treatment by quercetin (5 mg/kg i.v.) of intact and **ischemia**-reperfusion groups did not significantly change the signal amplitude in the cerebellum, but did double it in the cortex (to 76% of control) for the **ischemia**-reperfusion group ($P < 0.05$). In contrast, FB277 (3.75 mg/kg i.v.) did not increase the signal in the cortex during **ischemia**-reperfusion, but did do so in the cerebellum (to 152% of control, $P < 0.05$). The results obtained for PEG-SOD (10,000 U/kg i.v.) were similar to those for FB277. In sep. in vitro measurements, we found that quercetin but not FB277 efficiently scavenged superoxide. We hypothesize that quercetin but not FB277 scavenged superoxide anions released in the cortex during reperfusion, thus diminishing the amount of NO removed by the formation of peroxynitrite. The lack of effect of PEG-SOD may be related to the need for chronic treatment to obtain protection.

ACCESSION NUMBER: 1999:17049 HCAPLUS
DOCUMENT NUMBER: 130:205036
TITLE: Influence of the antioxidant quercetin in vivo on the level of nitric oxide determined by electron paramagnetic resonance in rat brain during global **ischemia** and reperfusion
AUTHOR(S): Shutenko, Zhanna; Henry, Yann; Pinard, Elisabeth; Seylaz, Jacques; Potier, Pierre; Berthet, Fabienne;

Girard, Pierre; Sercombe, Richard
CORPORATE SOURCE: Institut de Chimie des Substances Naturelles, UPR 2301 CNRS, Gif sur Yvette, 91198, Fr.
SOURCE: Biochemical Pharmacology (1999), 57(2), 199-208
CODEN: BCPCA6; ISSN: 0006-2952
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

TI . . . antioxidant quercetin in vivo on the level of nitric oxide determined by electron paramagnetic resonance in rat brain during global **ischemia** and reperfusion

AB We characterized the changes in nitric oxide (NO) levels in the brain during global forebrain **ischemia** and reperfusion and tested the ability of the natural flavonoid, quercetin, and a synthetic flavonoid, FB277, to increase the amount. . . by elimination of the superoxide radicals produced during reperfusion. In Sprague-Dawley rats, we used a four-vessel occlusion model of forebrain **ischemia** (15 min) and reperfusion (30 min). Brain NO was measured on samples of cerebral cortex and cerebellum ex vivo by. . . In control (intact anesthetized animals), the signal was about 3 times greater in the cortex than in the cerebellum. During **ischemia**, the signal rose to 110% in cortex (NS) and 283% in cerebellum ($P < 0.05$). In reperfusion, it fell again. . . . control in cerebellum (NS) and 35% in cortex ($P < 0.05$). Treatment by quercetin (5 mg/kg i.v.) of intact and **ischemia**-reperfusion groups did not significantly change the signal amplitude in the cerebellum, but did double it in the cortex (to 76% of control) for the **ischemia**-reperfusion group ($P < 0.05$). In contrast, FB277 (3.75 mg/kg i.v.) did not increase the signal in the cortex during **ischemia**-reperfusion, but did do so in the cerebellum (to 152% of control, $P < 0.05$). The results obtained for PEG-SOD (10,000. . .

ST flavonoid FB277 quercetin antioxidant forebrain **ischemia**; nitric oxide superoxide forebrain **ischemia** flavonoid

IT Polyoxyalkylenes, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(conjugates with superoxide dismutase, comparison with; effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global **ischemia** and reperfusion)

IT Anti-**ischemic** agents
Radical scavengers
(effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global **ischemia** and reperfusion)

IT Brain, disease
(forebrain, **ischemia**; effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global **ischemia** and reperfusion)

IT Reperfusion
(injury; effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global **ischemia** and reperfusion)

IT Antioxidants
(pharmaceutical; effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global **ischemia** and reperfusion)

IT 9054-89-1D, Superoxide dismutase, conjugates with polyethylene glycol
25322-68-3D, Polyethylene glycol, conjugates with superoxide dismutase

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(comparison with; effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global **ischemia** and reperfusion)

IT **220962-60-7**, FB 277
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global **ischemia** and reperfusion)

IT 117-39-5, Quercetin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global **ischemia** and reperfusion)

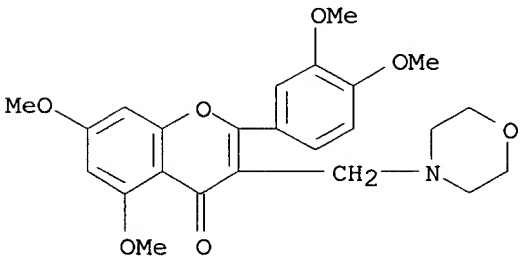
IT 10102-43-9, Nitric oxide, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global **ischemia** and reperfusion)

IT 11062-77-4, Superoxide
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(elimination of; effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global **ischemia** and reperfusion)

IT **220962-60-7**, FB 277
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global **ischemia** and reperfusion)

RN 220962-60-7 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,7-dimethoxy-3-(4-morpholinylmethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 32 OF 39 HCAPLUS COPYRIGHT 2004 ACS on STN

AB The invention concerns the use of a pharmaceutical composition comprising a

suitable pharmaceutical carrier and an active compound selected among the group consisting of bioflavonoids, rutin-garlic, troxerutin, coumarin, diosmin, o-(-hydroxyethyl) rutins, sweet clover and rutin exts., tribenoside, methylchalcone hesperidin, Indian chestnut extract, naphtazone, esculoside, aescin, procyanidine oligomers, butcher's broom and methylchalcone hesperidine exts., ruscosides, common holly and black currant exts., bilberry anthocyanin exts., the active principles of these compds. and/or a mixture of them, acting on a patient's mitochondrial membrane protein complexes, to prepare a medicine for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency.

ACCESSION NUMBER: 1998:764270 HCAPLUS
DOCUMENT NUMBER: 130:10641
TITLE: Use of a pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency
INVENTOR(S): Remacle, Jose; Michiels, Carine
PATENT ASSIGNEE(S): Belg.
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851291	A1	19981119	WO 1998-BE67	19980512
W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, DE, DE, EE, GE, GW, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
BE 1011151	A3	19990504	BE 1997-415	19970513
AU 9873272	A1	19981208	AU 1998-73272	19980512
EP 981339	A1	20000301	EP 1998-920410	19980512
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
JP 2001526658	T2	20011218	JP 1998-548622	19980512
NO 9905500	A	19991110	NO 1999-5500	19991110
US 2002165270	A1	20021107	US 2002-131921	20020423

PRIORITY APPLN. INFO.:

BE 1997-415	A	19970513
WO 1998-BE67	W	19980512
US 2000-423967	B1	20000320

TI Use of a pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency

AB . . . a mixture of them, acting on a patient's mitochondrial membrane protein complexes, to prepare a medicine for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency.

IT Transport proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ADP/ATP carrier; pharmaceutical composition for treating and/or preventing

ischemia and/or pathologies associated with **ischemia** or with energy deficiency)

IT Ginkgo
(Ginkor Fort; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Chestnut (Castanea)
(Indian, extract; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Blood vessel, disease
(Raynaud's phenomenon; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Skin
(alterations; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Dizziness
(and perspective adaptation loss; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Heart, disease
(angina pectoris; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Aglycons
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anthocyanidins, bilberry; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Antiarteriosclerotics
(antiatherosclerotics; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Vasoconstriction
(arterial; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Flavonoids
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bioflavonoids; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Heart, disease
(coronary obstruction; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Blood vessel
(endothelium; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Metabolism

(energy; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Bilberry
Currant (Ribes nigrum)
Ilex
Ruscus
Sweet clover (Melilotus)
(extract; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Transplant and Transplantation
(heart; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Stress, animal
(high-altitude; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Heart, disease
(infarction; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Vein
(insufficiency, chronic; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Brain, disease
Liver, disease
(**ischemia**; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Hearing
(loss; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(membrane, mitochondrial; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Brain
Liver
(mitochondria; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Respiration, animal
(mitochondrial; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT Procyanidins
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligomers; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or

with energy deficiency)
IT Capillary vessel
(permeability and fragility; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)
IT Biological transport
(permeation, capillary; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)
IT Aging, animal
Anti-**ischemic** agents
Antidiabetic agents
Antihypertensives
Antiulcer agents
Artery, disease
Atherosclerosis
Cardiovascular agents
Cognition enhancers
Diabetes mellitus
Drug delivery systems
Hypoxia, animal
Metabolism
Mitochondria
Transplant and Transplantation
Ulcer
(pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)
IT Hypertension
(pulmonary; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)
IT Mitochondria
(respiration; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)
IT Eye, disease
(retina, **ischemia**; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)
IT Garlic (Allium sativum)
(rutoside; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)
IT Skin, disease
(scar; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)
IT Blood vessel, disease
(spasm; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)
IT Heart
(transplant; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)
IT 153-18-4, Rutoside

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(garlic; pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT 50-99-7, D-Glucose, biological studies 58-64-0, Adenosine diphosphate, biological studies 110-15-6, Butanedioic acid, biological studies 9001-51-8, Hexokinase
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT 91-64-5, Coumarin 153-18-4D, Rutoside, hydroxyethyl derivs. 520-27-4, Diosmin 531-75-9, Esculoside 3200-06-4, Praxilene 6805-41-0, Aescin **7085-55-4**, Troxerutin 8003-26-7, Esberiven 10310-32-4, Tribenoside 15687-37-3, Naftazone 24292-52-2, Hesperidin methylchalcone 33570-04-6, Bilobalide 51024-64-7, Ruscoside 55965-63-4, Venoruton 64156-26-9, Reparil
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

IT 56-65-5, Adenosine triphosphate, biological studies 7782-44-7, Oxygen, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

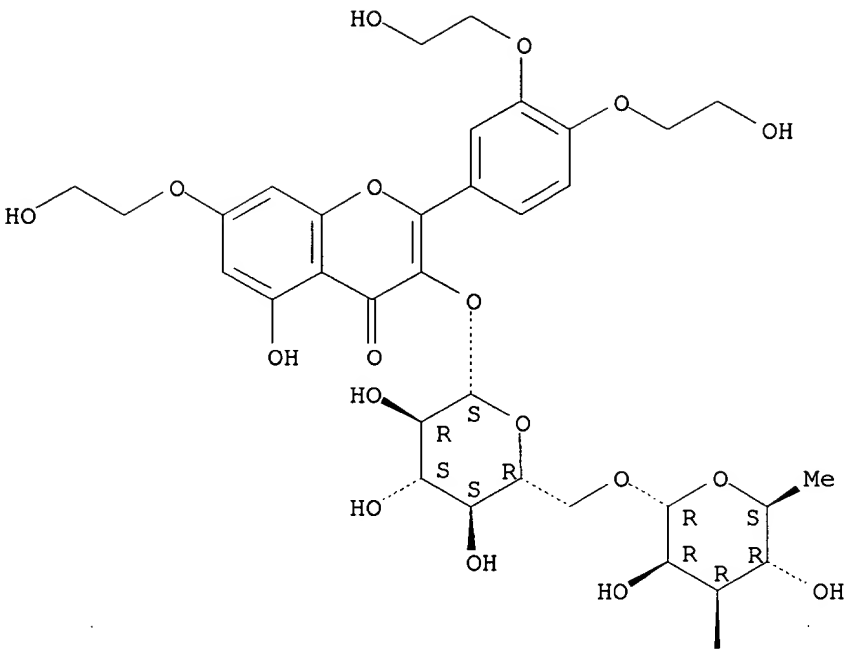
IT **7085-55-4**, Troxerutin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical composition for treating and/or preventing **ischemia** and/or pathologies associated with **ischemia** or with energy deficiency)

RN 7085-55-4 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-[3,4-bis(2-hydroxyethoxy)phenyl]-3-[[6-O-(6-deoxy-α-L-mannopyranosyl)-β-D-glucopyranosyl]oxy]-5-hydroxy-7-(2-hydroxyethoxy)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

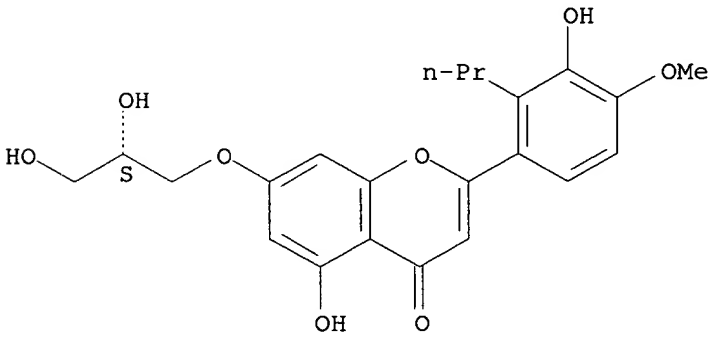
L5 ANSWER 33 OF 39 HCAPLUS COPYRIGHT 2004 ACS on STN

AB The novel flavonoid, S 19207, was studied after oral administration in the hamster. The compound dose-dependently (1 to 100 mg/kg) decreased macromol. leakage of FITC-dextran induced by histamine or **ischemia** /reperfusion in the cheek pouch microcirculation. The results thus illustrate the potential anti-edema action of this new substance.

ACCESSION NUMBER: 1997:360060 HCAPLUS
DOCUMENT NUMBER: 127:44673
TITLE: A novel flavonoid, S 19207, inhibits the macromolecular permeability increase in the hamster cheek pouch microcirculation
AUTHOR(S): Vallez, M. O.; Cyrino, F. Z. G. A.; Bouskela, E.; Boussard, M. F.; Wierzbicki, M.; Verbeuren, T. J.
CORPORATE SOURCE: Division of Angiology, Servier Research Institute, Suresnes, Fr.
SOURCE: World Congress for Microcirculation, 6th, Munich, Aug. 25-30, 1996 (1996), 663-667. Editor(s): Messmer, Konrad; Kuebler, Wolfgang M. Monduzzi Editore: Bologna, Italy.
CODEN: 64KQAW

DOCUMENT TYPE: Conference
LANGUAGE: English
AB . . . administration in the hamster. The compound dose-dependently (1 to 100 mg/kg) decreased macromol. leakage of FITC-dextran induced by histamine or **ischemia**/reperfusion in the cheek pouch microcirculation. The results thus illustrate the potential anti-edema action of this new substance.
IT **178367-19-6**, S 19207
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibition of macromol. permeability by flavonoid S 19207 in hamster cheek pouch microcirculation model)
IT **178367-19-6**, S 19207
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibition of macromol. permeability by flavonoid S 19207 in hamster cheek pouch microcirculation model)
RN 178367-19-6 HCAPLUS
CN 4H-1-Benzopyran-4-one, 7-[(2S)-2,3-dihydroxypropoxy]-5-hydroxy-2-(3-hydroxy-4-methoxy-2-propylphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 34 OF 39 HCAPLUS COPYRIGHT 2004 ACS on STN
AB The observed clin. curative effects of propylene glycol alginate sodium sulfate (PSS) and troxerutin (TR) on 152 patients with pseudobulbar paralysis caused by **ischemic** cerebral infarction, and the patients' laboratory parameters were studied. 76 Patients (M46, F30, mean ages 62±6y) were treated with PSS (PSS 150 mg in 5% Glucose solution 500 mL i.v. drip.qd) for 14 days as a course. The other 76 patients (M46, F30, mean ages 63±7y) were treated with TR (TR 600 mg in hydroxyethyl-starch 500 mL i.v.drip.qd) for 14 days as a course. The total effectiveness rates of the two groups were 94-74% and 77.63, resp. The plasma levels of cholesterol and triglyceride were decreased significantly in PSS group.
ACCESSION NUMBER: 1996:339592 HCAPLUS
DOCUMENT NUMBER: 125:75190
TITLE: A comparative study of PSS and troxerutin in the treatment of pseudobulbar paralysis
AUTHOR(S): Wang, Shaoping; Liu, Shunqing
CORPORATE SOURCE: Dep. Neurol., Second Affiliated Hosp. Med. Coll.,

Qingdao Univ., Tsingtao, 266042, Peop. Rep. China
SOURCE: Zhongguo Haiyang Yaowu (1995), 14(4), 30-33
CODEN: ZHYAE8; ISSN: 1002-3461
PUBLISHER: Shandong Haiyang Yaowu Kexue Yanjiuso
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB . . . curative effects of propylene glycol alginate sodium sulfate (PSS) and troxerutin (TR) on 152 patients with pseudobulbar paralysis caused by **ischemic** cerebral infarction, and the patients' laboratory parameters were studied. 76 Patients (M46, F30, mean ages 62±6y) were treated with PSS. . .

IT Brain, disease
(infarction, **ischemic**; a comparative study of PSS and troxerutin in the treatment of pseudobulbar paralysis)

IT **7085-55-4**, Troxerutin 130392-34-6, Propylene glycol alginate sodium sulfate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(a comparative study of PSS and troxerutin in the treatment of pseudobulbar paralysis)

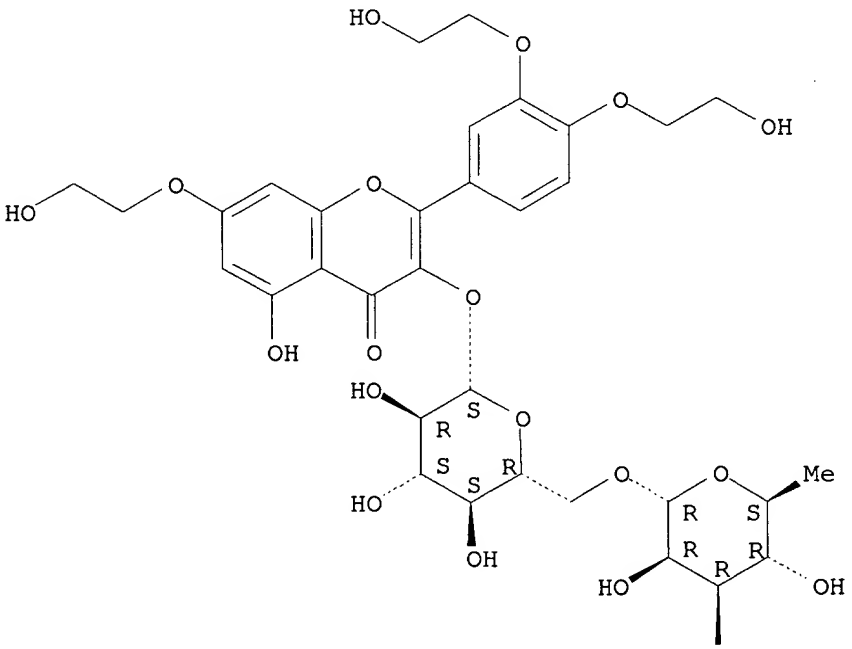
IT **7085-55-4**, Troxerutin
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(a comparative study of PSS and troxerutin in the treatment of pseudobulbar paralysis)

RN 7085-55-4 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-[3,4-bis(2-hydroxyethoxy)phenyl]-3-[[6-O-(6-deoxy-α-L-mannopyranosyl)-β-D-glucopyranosyl]oxy]-5-hydroxy-7-(2-hydroxyethoxy)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



L5 ANSWER 35 OF 39 HCAPLUS COPYRIGHT 2004 ACS on STN

AB During **ischemic** perfusion and reperfusion of isolated rat hearts, 1OH and carbon-centered radicals were trapped in the perfusate. Both radicals were found to occur during lipid peroxidn. (LPO) which was enhanced in the myocardium. The increase of LPO as well as of enzyme leakage were reduced by mannitol and the flavonoid troxerutin. The assumption that radical-induced LPO is of pathogenetic relevance during myocardial reperfusion injury for which antioxidants could be of therapeutic advantage is supported.

ACCESSION NUMBER: 1988:19988 HCAPLUS
DOCUMENT NUMBER: 108:19988
TITLE: Radical trapping and lipid peroxidation during myocardial reperfusion injury - radical scavenging by troxerutin in comparison to mannitol
AUTHOR(S): Blasig, I. E.; Lowe, H.; Ebert, B.
CORPORATE SOURCE: Inst. Drug Res., Ger. Acad. Sci., Berlin, DDR-1136, Ger. Dem. Rep.
SOURCE: Biomedica Biochimica Acta (1987), 46(8-9), S539-S544
CODEN: BBIADT; ISSN: 0232-766X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB During **ischemic** perfusion and reperfusion of isolated rat hearts, 1OH and carbon-centered radicals were trapped in the perfusate. Both radicals were found. . .

ST radical lipid peroxidn heart damage **ischemia**; troxerutin heart **ischemia** lipid peroxidn; mannitol heart **ischemia** lipid peroxidn

IT Radicals, biological studies
RL: BIOL (Biological study)
(lipid peroxidn. induction by, in heart damage after **ischemia**)

IT Peroxidation
(of lipids, radical-induced, in heart damage after **ischemia**)

IT Lipids, biological studies
RL: BIOL (Biological study)
(peroxidn. of, radical-induced, in heart damage after **ischemia**)

IT Heart, disease or disorder
(**ischemia**, radical-induced lipid peroxidn. in cardiac damage after)

IT 69-65-8, Mannitol **7085-55-4**
RL: BIOL (Biological study)
(heart **ischemia** treatment with, lipid peroxidn. in)

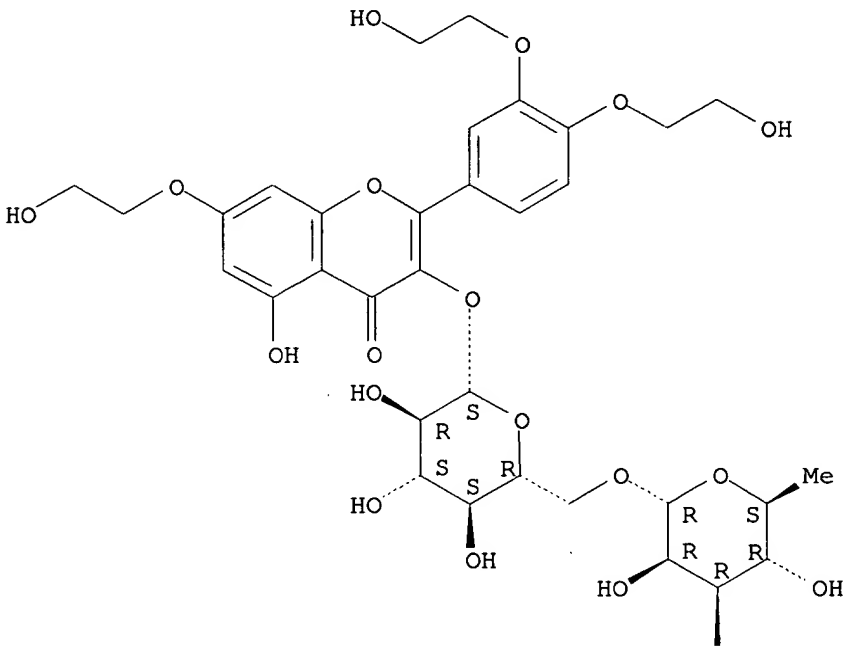
IT 3352-57-6, Hydroxyl, biological studies
RL: BIOL (Biological study)
(lipid peroxidn. induction by, in heart damage after **ischemia**)

IT **7085-55-4**
RL: BIOL (Biological study)

(heart **ischemia** treatment with, lipid peroxidn. in)
RN 7085-55-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[3,4-bis(2-hydroxyethoxy)phenyl]-3-[[6-O-(6-deoxy-α-L-mannopyranosyl)-β-D-glucopyranosyl]oxy]-5-hydroxy-7-(2-hydroxyethoxy)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

L5 ANSWER 36 OF 39 HCAPLUS COPYRIGHT 2004 ACS on STN
AB The endothelium-protective activity of a series of low-mol.-weight scavengers of O-derived free radicals (OFRS) was tested in rats. A model of endothelemia provoked by i.v. administration of H2O2 was used. With each OFRS, the activity in the H2O2 model was compared with that in a less specific model, provocation by citrate as a Ca2+-chelating agent. Relatively unspecific but biol. important OFRS, ascorbic acid [50-81-7], tocopherol acetate [1406-70-8], troxerutin [**7085-55-4**] and glutathione [70-18-8], were tested in the 1st phase of the study. A marked optimum of endothelium-protective activity was shown with all agents; the optimum against H2O2 was observed at doses 3-50 times lower than that against citrate. Ascorbic acid, troxerutin and the combination of both were also tested in another model based on leg **ischemia** produced by ligature of the common femoral artery. Without OFRS, a marked

increase in endothelemia was observed after 30-60-min **ischemia**, showing a 2nd peak after the release of the ligature. This 2nd peak was completely abolished by the prior administration of OFRS in a dose which was also effective in the H2O2 model.

ACCESSION NUMBER: 1986:454580 HCAPLUS
DOCUMENT NUMBER: 105:54580
TITLE: Protective effect of oxygen-derived free radical scavengers on the endothelium in vivo
AUTHOR(S): Hladovec, J.
CORPORATE SOURCE: Inst. Clin. Exp. Med., Prague, 14622/4, Czech.
SOURCE: Physiologia Bohemoslovaca (1986), 35(2), 97-103
CODEN: PHBOBQ; ISSN: 0369-9463
DOCUMENT TYPE: Journal
LANGUAGE: English

AB . . . provocation by citrate as a Ca2+-chelating agent. Relatively unspecific but biol. important OFRS, ascorbic acid [50-81-7], tocopherol acetate [1406-70-8], troxerutin [**7085-55-4**] and glutathione [70-18-8], were tested in the 1st phase of the study. A marked optimum of endothelium-protective activity was shown. . . that against citrate. Ascorbic acid, troxerutin and the combination of both were also tested in another model based on leg **ischemia** produced by ligature of the common femoral artery. Without OFRS, a marked increase in endothelemia was observed after 30-60-min **ischemia**, showing a 2nd peak after the release of the ligature. This 2nd peak was completely abolished by the prior administration. . .

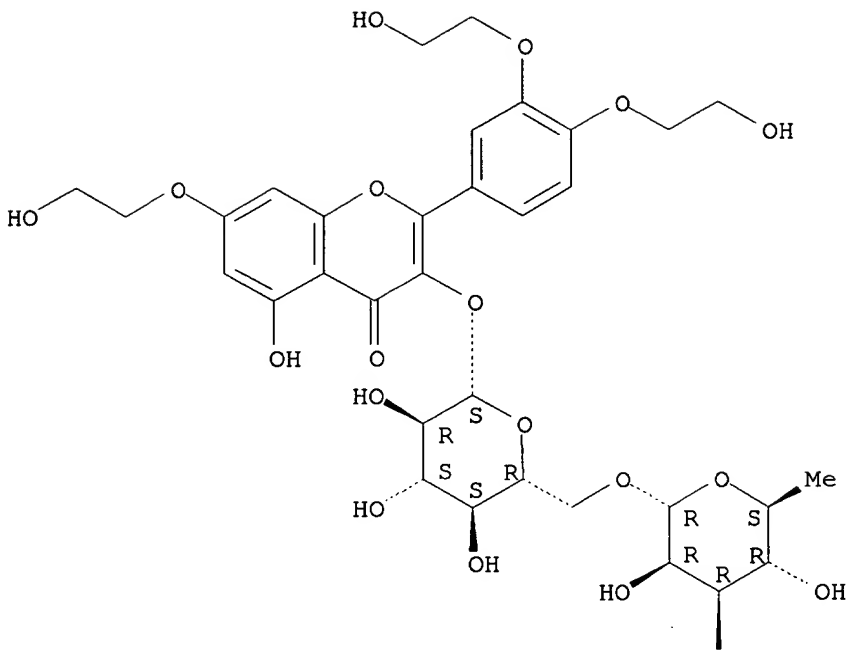
IT 50-78-2 50-81-7, biological studies 58-95-7 70-18-8, biological studies **7085-55-4** 9005-49-6, biological studies
RL: BIOL (Biological study)
(endothelium injury prevention by)

IT **7085-55-4**
RL: BIOL (Biological study)
(endothelium injury prevention by)

RN 7085-55-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[3,4-bis(2-hydroxyethoxy)phenyl]-3-[[6-O-(6-deoxy-α-L-mannopyranosyl)-β-D-glucopyranosyl]oxy]-5-hydroxy-7-(2-hydroxyethoxy)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

L5 ANSWER 37 OF 39 HCAPLUS COPYRIGHT 2004 ACS on STN

AB Dogs were given a combination of Venalot (coumarin-rutin sulfate mixture)(I-II mixture) [**39291-13-9**] before the induction of pancreatic **ischemia** and during revascularization. The drug did not affect pancreatic secretion during the preischemic phase. During the postischemia phase, the volume of secretion, and outputs of HCO3- and amylase were significantly higher in the Venalot-treated dogs than in the control ones. Both groups however showed a marked disturbance of exocrine pancreatic function. This effect of Venalot is attributed to its antiedematous action.

ACCESSION NUMBER: 1982:62802 HCAPLUS
DOCUMENT NUMBER: 96:62802
TITLE: The effect of benzopyrones on pancreatic secretion in anesthetized dogs with short-term **ischemia**
AUTHOR(S): Nozickova, Marie; Bartos, Vladimir; Hachowa, Ljuba
CORPORATE SOURCE: Res. Cent. Organ Transplantation, Inst. Clin. Exp. Med., Prague, Czech.
SOURCE: Materia Medica Polona (English Edition) (1981), 13(1), 23-5
CODEN: MMDPA6; ISSN: 0025-5246
DOCUMENT TYPE: Journal
LANGUAGE: English

DELACROIX

TI The effect of benzopyrones on pancreatic secretion in anesthetized dogs with short-term **ischemia**

AB Dogs were given a combination of Venalot (coumarin-rutin sulfate mixture)(I-II mixture) [**39291-13-9**] before the induction of pancreatic **ischemia** and during revascularization. The drug did not affect pancreatic secretion during the preischemic phase. During the postischemia phase, the volume. . .

ST benzopyrone pancreas secretion **ischemia**; Venalot pancreas secretion **ischemia**

IT Pancreas, disease or disorder
(**ischemia**, Venalot effect on secretion in)

IT **39291-13-9**
RL: BIOL (Biological study)
(pancreatic secretion response to, in **ischemia**)

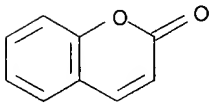
IT **39291-13-9**
RL: BIOL (Biological study)
(pancreatic secretion response to, in **ischemia**)

RN 39291-13-9 HCAPLUS

CN 2H-1-Benzopyran-2-one, mixt. with 2-[3,4-bis(2-hydroxyethoxy)phenyl]-3-[[6-O-(6-deoxy-α-L-mannopyranosyl)-β-D-glucopyranosyl]oxy]-5-hydroxy-7-(2-hydroxyethoxy)-4H-1-benzopyran-4-one hydrogen sulfate sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 91-64-5
CMF C9 H6 O2

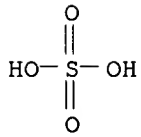


CM 2

CRN 73689-12-0
CMF C33 H42 O19 . x H2 O4 S . x Na

CM 3

CRN 7664-93-9
CMF H2 O4 S

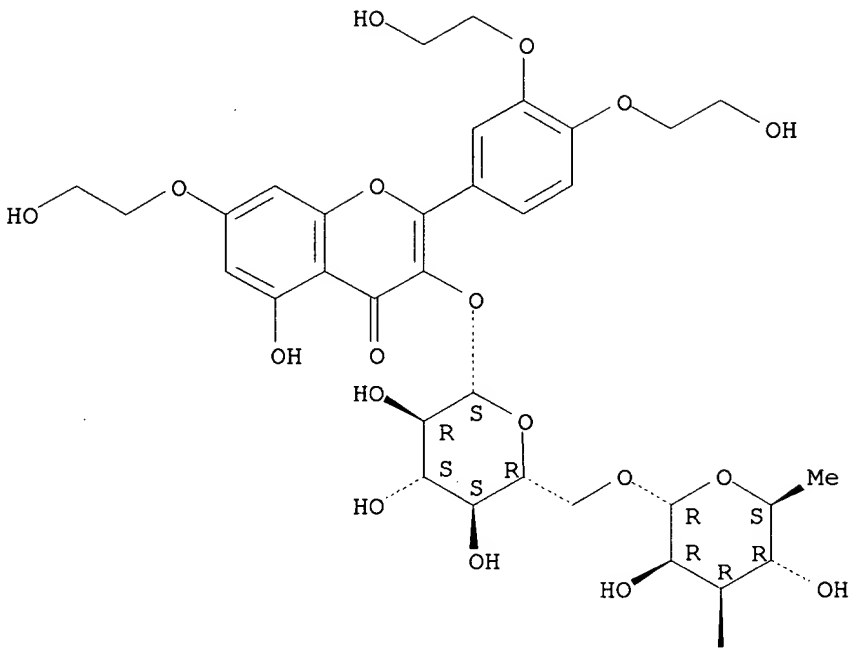


CM 4

CRN 7085-55-4
CMF C33 H42 O19

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

L5 ANSWER 38 OF 39 USPATFULL on STN

AB Acetals and ketals of benzopyran glycosides, prepared by condensing a benzopyran glycoside with a carbonyl compound using a chloroformate ester as condensing agent, show enhanced activity in treating capillary fragility and related pathologies, as well as effectiveness in modifying the evolution of diabetic cataracts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	80:33159 USPATFULL
TITLE:	Benzopyran glycoside acetals and ketals
INVENTOR(S):	Fauran, Francois, Castanet-Tolosan, France Feniou, Claude, Pessac, France Mosser, Jacqueline, St-Medard-en-Jalles, France Thibault, Annie, Le Bouscat, France Andre, Claude, Fontaine, France Prat, Gisele, Talence, France
PATENT ASSIGNEE(S):	Laboratoires Sarget, Merignac, France (non-U.S.

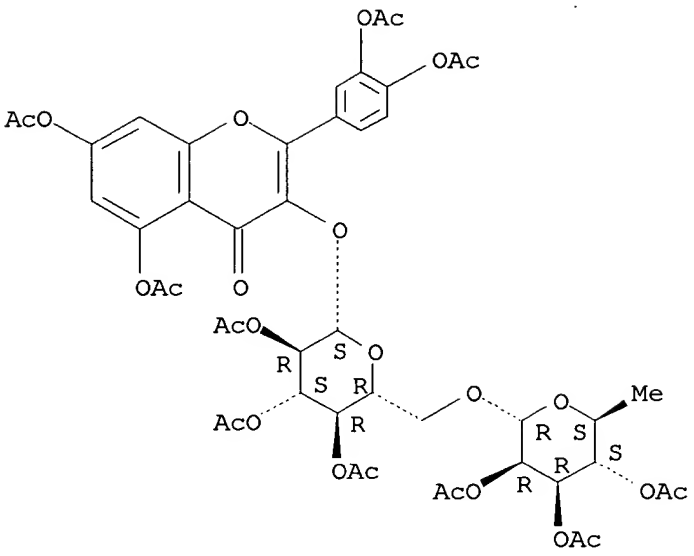
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4211772		19800708
APPLICATION INFO.:	US 1978-911634		19780601 (5)

	NUMBER	DATE
PRIORITY INFORMATION:	FR 1977-16817	19770602
	FR 1978-13807	19780510
	FR 1978-13808	19780510

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Brown, Johnnie R.
ASSISTANT EXAMINER: Hazel, Blondel
LEGAL REPRESENTATIVE: Oblon, Fisher, Spivak, McClelland & Maier
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1,8
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 783
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
DETD . . . fragilization of the wall or high risk vascular conditions; for example, varices, hemmorhoids, edemas, purpuras, arterial hypertension, hemorrhagic syndromes, glomerulonephritis, **ischemic** cardiopathies, hepatic insufficiency, and diabetes. Furthermore the inhibitory effects on aldose reductase shown by these compounds allows them to be. . .
IT **2328-13-4**
(NMR of)
IT **75721-58-3P**
(preparation and NMR of)
IT **2328-13-4**
(NMR of)
RN 2328-13-4 USPATFULL
CN 4H-1-Benzopyran-4-one, 5,7-bis(acetyloxy)-2-[3,4-bis(acetyloxy)phenyl]-3-[[2,3,4-tri-O-acetyl-6-O-(2,3,4-tri-O-acetyl-6-deoxy-α-L-mannopyranosyl)-β-D-glucopyranosyl]oxy]- (9CI) (CA INDEX NAME)

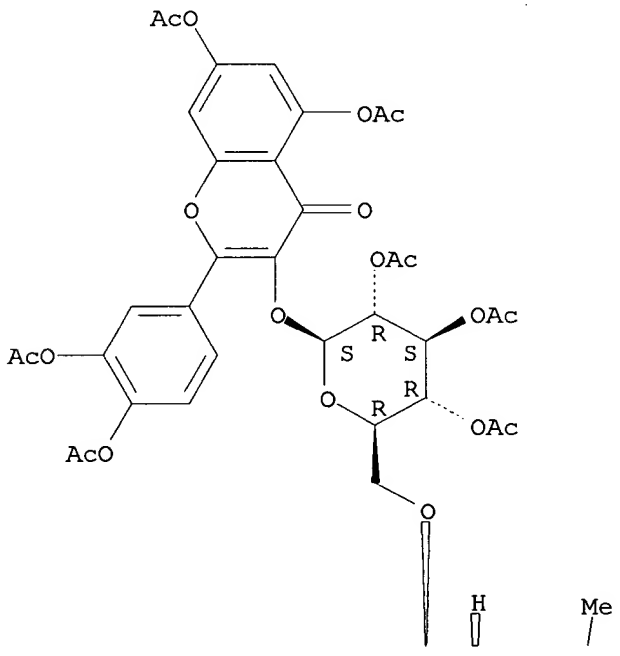
Absolute stereochemistry.



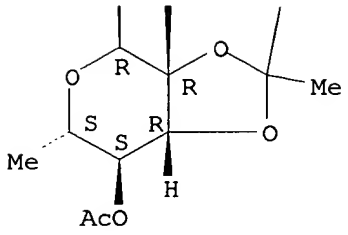
IT **75721-58-3P**
(preparation and NMR of)
RN 75721-58-3 USPATFULL
CN 4H-1-Benzopyran-4-one, 5,7-bis(acetyloxy)-2-[3,4-bis(acetyloxy)phenyl]-3-[[2,3,4-tri-O-acetyl-6-O-[4-O-acetyl-6-deoxy-2,3-O-(1-methylethylidene)-α-L-mannopyranosyl]-β-D-glucopyranosyl]oxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



L5 ANSWER 39 OF 39 HCAPLUS COPYRIGHT 2004 ACS on STN

AB The effect of Venoruton (O-(β-hydroxyethyl)rutosides) [**7085-55-4**] on function and structure of the motor anterior horn cells of the lumbar spinal cord was investigated under conditions of **ischemia** in the rabbit. The determination of the functional parameters of the ganglion cells, such as maximum function time (Fm), disappearance time (SFm), relative efficiency (La), and regeneration expenditure (Ea) revealed that 50 mg/kg of Venoruton injected prior to repeated aortic occlusion of short duration (occlusion time A = Fm and A = 2 Fm, resp.) caused the efficiency of the anterior-horn cells to be decreased. Both qual. and quant. anal. of the mitochondrial structure after prolonged aortic occlusion (15-25 min) revealed that after prior injection of Venoruton irreversible structural changes in the mitochondrial membranes of the **ischemic** area in the spinal cord occurred after aortic occlusion of 15 min duration. In the untreated controls such changes were not observed before 20 min of occlusion. The mitochondrial structure of the non-**ischemic** area in the spinal cord was found to be undamaged, however, in both controls and exptl. animals. Venoruton given after prolonged aortic occlusion resulted in less pronounced structural changes of the mitochondria in the **ischemic** area of the exptl. animals than those found in the untreated controls; paralysis of the hind extremities was found to occur only after prolonged occlusion (25 min), whereas in the controls such changes were already observed after 20 min of occlusion. Since no ultrastructural changes in the ganglion cells of the non-**ischemic** area in the lumbar spinal cord were observed after application of Venoruton, it is assumed that the decreased efficiency of the motor anterior-horn cells found in the **ischemic** area when Venoruton had been injected before the aortic occlusion may be due to reactions of the cell that only occur when the blood supply has been completely cut off and Venoruton is present at the same time.

ACCESSION NUMBER: 1976:554041 HCAPLUS
DOCUMENT NUMBER: 85:154041
TITLE: The effect of O-(β-hydroxyethyl)rutosides on function and structure of the ganglion cells
AUTHOR(S): Blasius, W.; Leusser, K.; Merker, G.
CORPORATE SOURCE: Dep. Physiol., Justus Liebig-Univ., Giessen, Fed. Rep. Ger.
SOURCE: Arzneimittel-Forschung (1976), 26(9), 1645-50
CODEN: ARZNAD; ISSN: 0004-4172
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The effect of Venoruton (O-(β-hydroxyethyl)rutosides) [

7085-55-4] on function and structure of the motor anterior horn cells of the lumbar spinal cord was investigated under conditions of **ischemia** in the rabbit. The determination of the functional parameters of the ganglion cells, such as maximum function time (Fm), disappearance. . . aortic occlusion (15-25 min) revealed that after prior injection of Venoruton irreversible structural changes in the mitochondrial membranes of the **ischemic** area in the spinal cord occurred after aortic occlusion of 15 min duration. In the untreated controls such changes were not observed before 20 min of occlusion. The mitochondrial structure of the non-**ischemic** area in the spinal cord was found to be undamaged, however, in both controls and exptl. animals. Venoruton given after prolonged aortic occlusion resulted in less pronounced structural changes of the mitochondria in the **ischemic** area of the exptl. animals than those found in the untreated controls; paralysis of the hind extremities was found to. . . such changes were already observed after 20 min of occlusion. Since no ultrastructural changes in the ganglion cells of the non-**ischemic** area in the lumbar spinal cord were observed after application of Venoruton, it is assumed that the decreased efficiency of the motor anterior-horn cells found in the **ischemic** area when Venoruton had been injected before the aortic occlusion may be due to reactions of the cell that only. . .

ST Venorutin spinal cord **ischemia**; rutoside deriv spinal cord **ischemia**

IT Spinal cord
(motor anterior-horn cells of, Venorutin effect on, in **ischemia**)

IT **Ischemia**
(of spinal cord, Venorutin effect on motor anterior-horn cells in)

IT **7085-55-4**
RL: BIOL (Biological study)
(spinal cord motor anterior-horn cells response to, in **ischemia**)

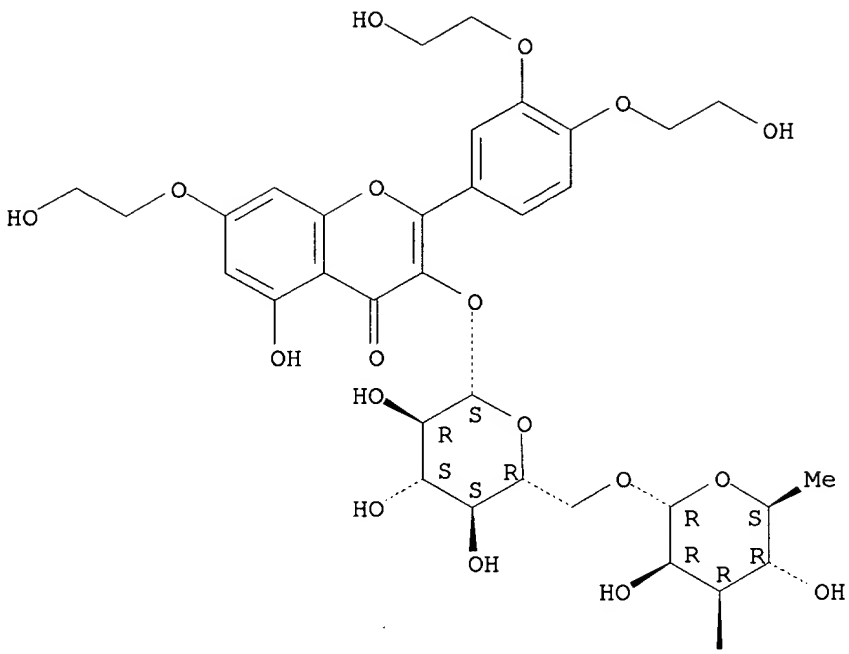
IT **7085-55-4**
RL: BIOL (Biological study)
(spinal cord motor anterior-horn cells response to, in **ischemia**)

RN 7085-55-4 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-[3,4-bis(2-hydroxyethoxy)phenyl]-3-[[6-O-(6-deoxy-α-L-mannopyranosyl)-β-D-glucopyranosyl]oxy]-5-hydroxy-7-(2-hydroxyethoxy)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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